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Classification Data

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AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

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FILE 'HOME' ENTERED AT 07:49:24 ON 20 JAN 2009

=> file reg
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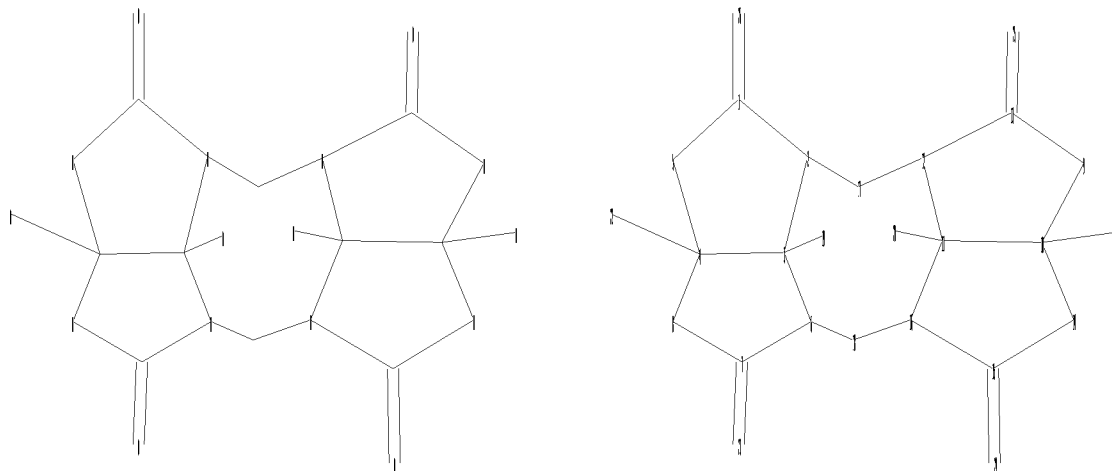
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=>

Uploading C:\Program Files\Stnexp\Queries\10598861\Struc 2.str



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chain nodes :
19 20 21 22 23 24 25 26
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
chain bonds :
1-26 3-19 4-22 7-23 10-21 11-20 13-25 15-24
ring bonds :
1-2 1-5 2-3 2-17 3-4 3-6 4-5 4-8 6-7 6-18 7-8 9-10 9-13 10-11 10-14
11-12 11-16 12-13 12-17 14-15 15-16 16-18

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10598861a.trn

exact/norm bonds :

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16-18

exact bonds :

10-21 11-20

Match level :

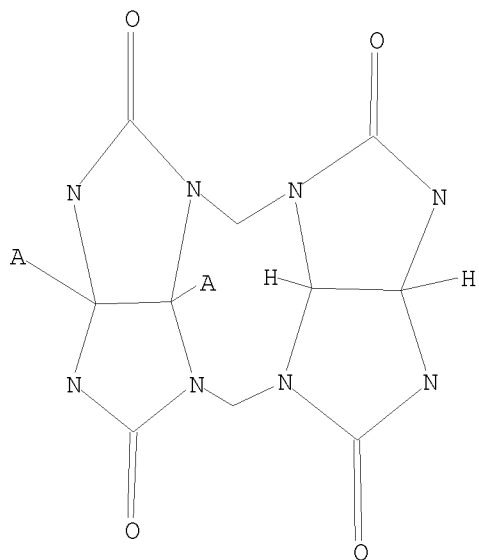
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20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS

L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> 11

SAMPLE SEARCH INITIATED 07:49:57 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 216 TO ITERATE

100.0% PROCESSED 216 ITERATIONS

3 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 3439 TO 5201

10598861a.trn

PROJECTED ANSWERS: 3 TO 163

L2 3 SEA SSS SAM L1

=> l1 full

FULL SEARCH INITIATED 07:50:00 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 4159 TO ITERATE

100.0% PROCESSED 4159 ITERATIONS

35 ANSWERS

SEARCH TIME: 00.00.01

L3 35 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

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186.10

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FILE COVERS 1907 - 20 Jan 2009 VOL 150 ISS 4

FILE LAST UPDATED: 19 Jan 2009 (20090119/ED)

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Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

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=> l3

L4 18 L3

=> d ibib abs hitstr 1-18

L4 ANSWER 1 OF 18 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:1372317 CAPLUS

DOCUMENT NUMBER: 150:55645

TITLE: Host-guest inclusion complexes of four partial alkyl-substituted cucurbit[6]urils with some probe guests

AUTHOR(S): Yu, Da-Hai; Ni, Xin-Long; Tian, Zhong-Cheng; Zhang,

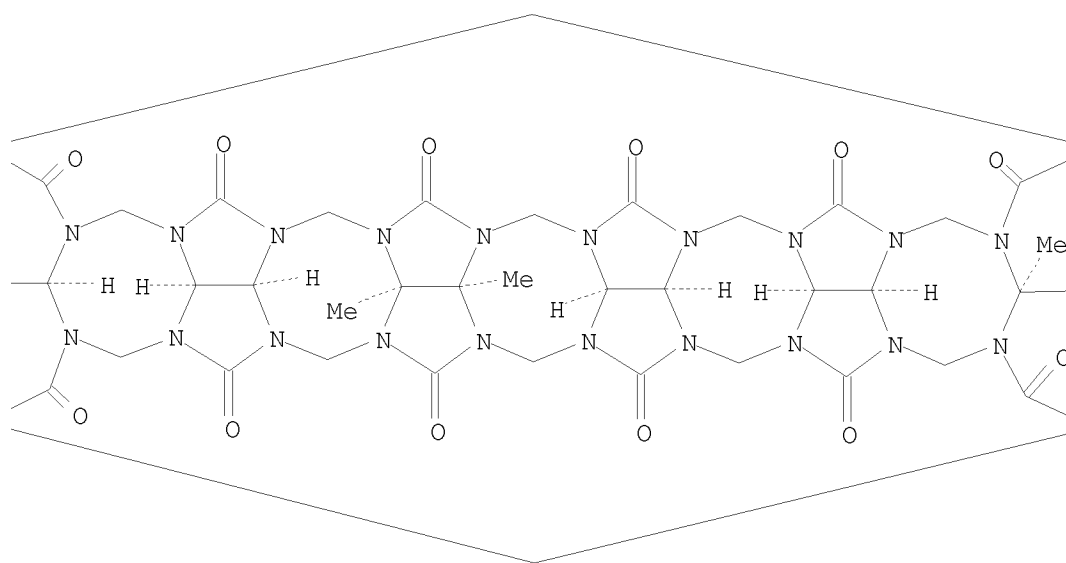
Yun-Qin; Xue, Sai-Feng; Tao, Zhu; Zhu, Qing-Jiang
 CORPORATE SOURCE: Key Laboratory of Macrocyclic and Supramolecular
 Chemistry of Guizhou Province, Guizhou University,
 Guiyang, 550025, Peop. Rep. China
 SOURCE: Journal of Molecular Structure (2008), 891(1-3),
 247-253
 CODEN: JMOSB4; ISSN: 0022-2860
 PUBLISHER: Elsevier B.V.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Using probe guests, three host-guest inclusion complexes of two new
 alkyl-substituted cucurbit[6]uril hosts, ortho-tetramethyl cucurbit[6]uril
 (o-TMeQ[6]) and sym. tetracyclohexano cucurbit[6]uril (TCyHQ[6]) have been
 characterized successfully by single crystal X-ray diffractions. They are
 {o-TMeQ[6]-5,5'-dimethyl-2,2'-bispyridine (DMBPY.H)+}Cl-21H₂O (1),
 {(o-TMeQ[6])2-1,6-bisbenzoimidazolylhexane (SBH.2H)2+} 2Cl-52H₂O (2) and
 {TCyHQ[6]-dioxane}14H₂O (3). Moreover, two similar crystal structure of
 two inclusion complexes of other two partial substituted cucurbit[6]urils,
 meta-hexamethyl cucurbit[6]uril (m-HMeQ[6]) and sym. dicyclohexano
 cucurbit[6]uril (p-(CyH)2Q[6]) with HCl salt of DMBPY were also reported.
 They were {p-(CyH)2Q[6]-DMBPY +}Cl-16H₂O (4) and {m-HMeQ[6]-DMBPY
 +}Cl-15H₂O (5). The driving force for the information of the host-guest
 inclusion complexes can be attributed to not only the cavity interaction
 (host), but also the hydrogen bonding and ion-dipole interaction between
 the carbonyl oxygen at the portals of the host and the protonated nitrogen
 of the guest.
 IT 1092792-08-9P 1092792-09-0P 1092792-10-3P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (crystallog.; host-guest inclusion complexes of four partial
 alkyl-substituted cucurbit[6]urils with some probe guests)
 RN 1092792-08-9 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED
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 CRN 848440-56-2
 CMF C40 H44 N24 O12

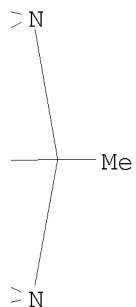
Relative stereochemistry.

PAGE 1-A



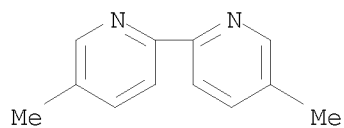
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CMF C12 H12 N2



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CN INDEX NAME NOT YET ASSIGNED

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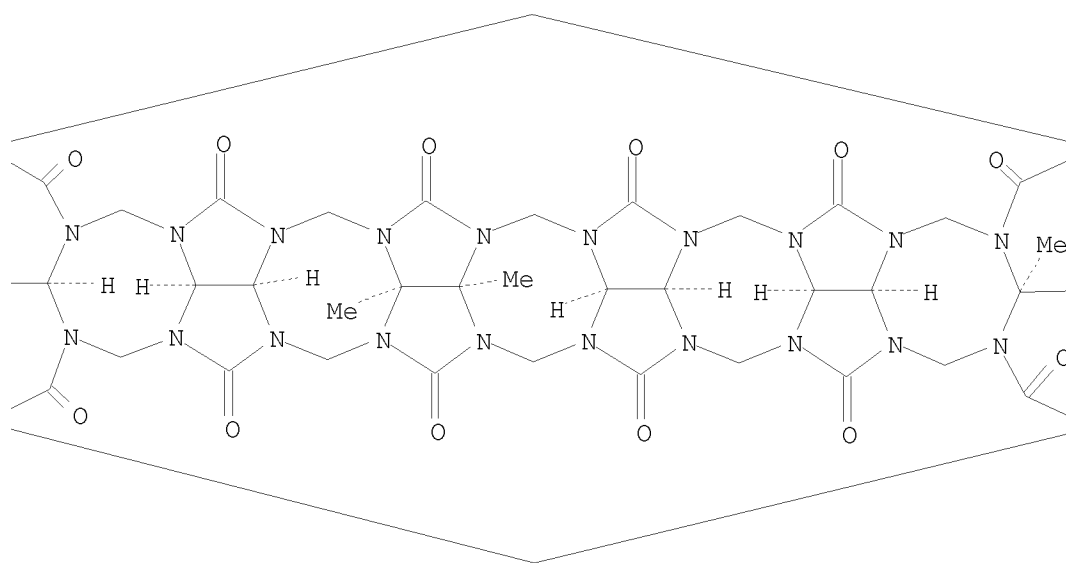
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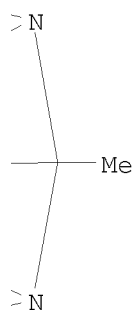
Relative stereochemistry.

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PAGE 1-B

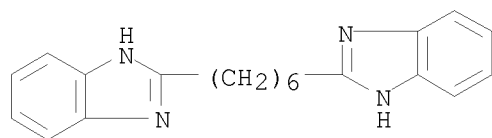




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CRN 52059-98-0

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RN 1092792-10-3 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

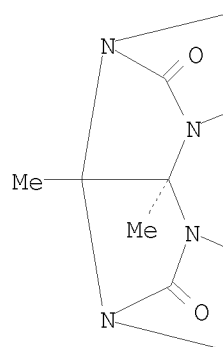
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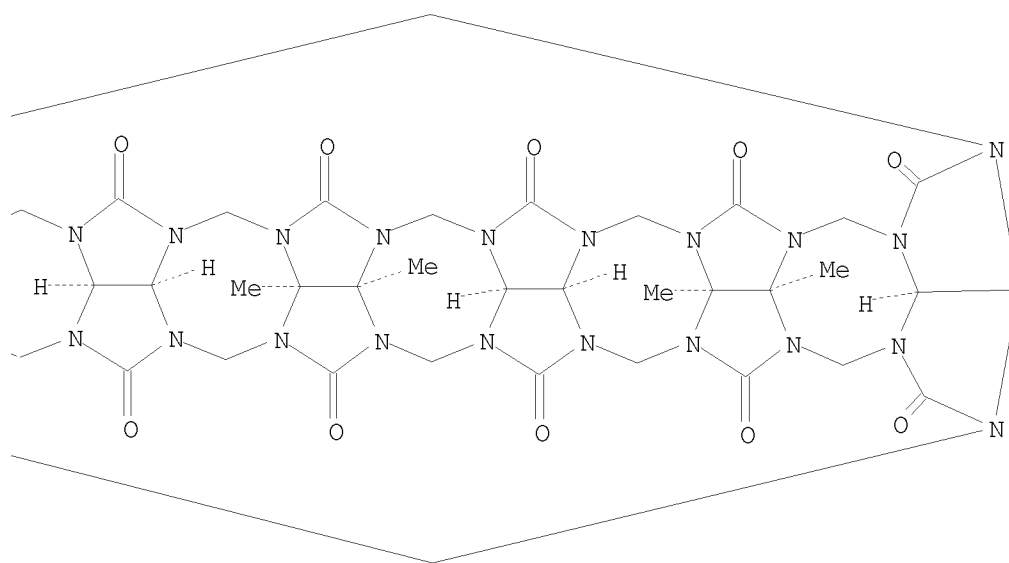
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Relative stereochemistry.

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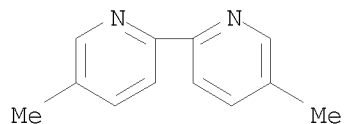


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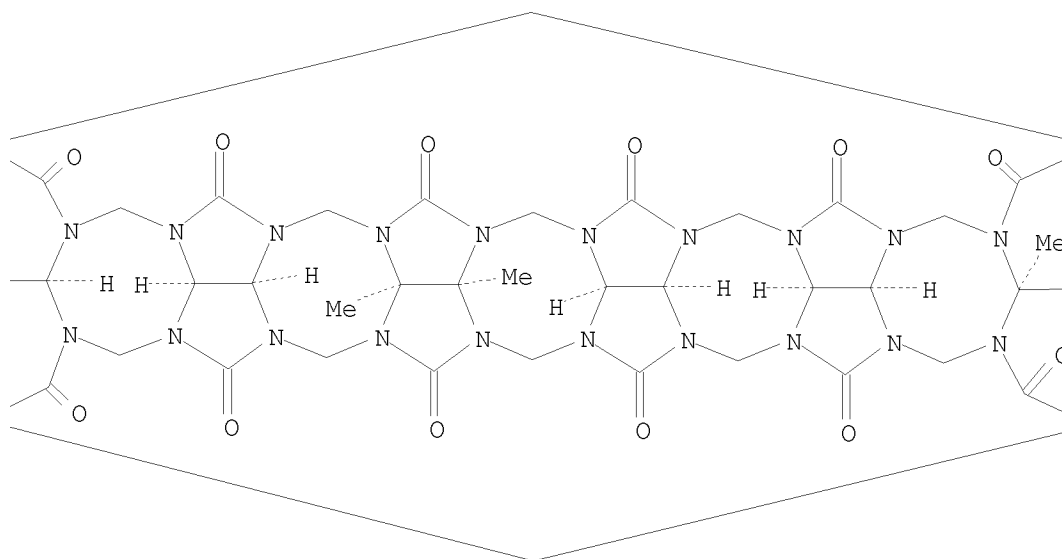
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 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (host, inclusion reaction; host-guest inclusion complexes of four
 partial alkyl-substituted cucurbit[6]urils with some probe guests)
 RN 848440-56-2 CAPLUS
 CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-
 5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-
 2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24
 a, 25a, 26a-tetracosazabispentaleno[1''', 6''':5'', 6'', 7'']cycloocta[1'', 2''
 , 3'':3', 4']pentaleno[1', 6':5, 6, 7]cycloocta[1, 2, 3-gh:1', 2', 3'-
 g'h']cycloocta[1, 2, 3-cd:5, 6, 7-c'd']dipentalene-
 1, 4, 6, 8, 10, 12, 14, 17, 19, 21, 23, 25-dodecone,
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Relative stereochemistry.

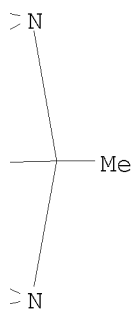
PAGE 1-A



PAGE 1-B



PAGE 1-C



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 18 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:1198526 CAPLUS

DOCUMENT NUMBER: 149:493259

TITLE: Interaction models of three alkyl substituted cucurbit[6]urils with a hydrochloride salt of 4,4'-dipyridyl guest

AUTHOR(S): Tian, Zhong-Cheng; Ni, Xin-Long; Xiao, Xin; Wu, Feng; Zhang, Yun-Qian; Zhu, Qian-Jiang; Xue, Sai-Feng; Tao,

CORPORATE SOURCE: Zhu
 Key Laboratory of Macrocyclic and Supramolecular
 Chemistry of Guizhou Province, Guizhou University,
 Guiyang, 550025, Peop. Rep. China
 SOURCE: Journal of Molecular Structure (2008), 888(1-3), 48-54
 CODEN: JMOSB4; ISSN: 0022-2860
 PUBLISHER: Elsevier B.V.
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Three host-guest complexes, {(H₂O)₂@(CyH)₂Q[6]}
 (4,4'-bpyH)+·Cl-·10H₂O (1),
 {(1,4-dioxane)@m-TriCyHQ[6]}(4,4'-bpyH)+·Cl-·19H₂O (2),
 {(4,4'-bpyH₂)₂@TMeQ[6]}.cntdot.2Br-.cntdot.11H₂O (3), were prepared with
 three different alkyl substituted cucurbit[6]urils, sym.
 dicyclohexanocucurbit[6]uril {(CyH)₂Q[6]}, meta
 tricyclohexanocucurbit[6]uril (m-TriCyHQ[6]), sym.
 tetramethylcucurbit[6]uril (TMeQ[6]), and a HCl salt
 4,4'-dipyridyl(4,4'-bpyHCl) or a HBr salt 4,4'-dipyridyl[4,4'-bpy(HBr)₂]
 guest. Their crystal structures characterized by single-crystal X-ray
 diffractions revealed that these hosts can form supramol. assemblies with
 the halogen hydride salts of the guest 4,4'-bpy through the ion-dipole
 interaction, hydrogen bonding, C-H··· π or
 N-H··· π interaction and
 π ··· π stacking. The substituted alkyl group
 could affect the interaction model and assembled characteristic of the
 host and the guest.

IT 1072627-22-5P
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); SPN
 (Synthetic preparation); PREP (Preparation); PROC (Process)
 (crystallog.; interaction models of three alkyl substituted
 cucurbit[6]urils with hydrochloride salt of 4,4'-dipyridyl guest)
 RN 1072627-22-5 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED

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CRN 848440-56-2

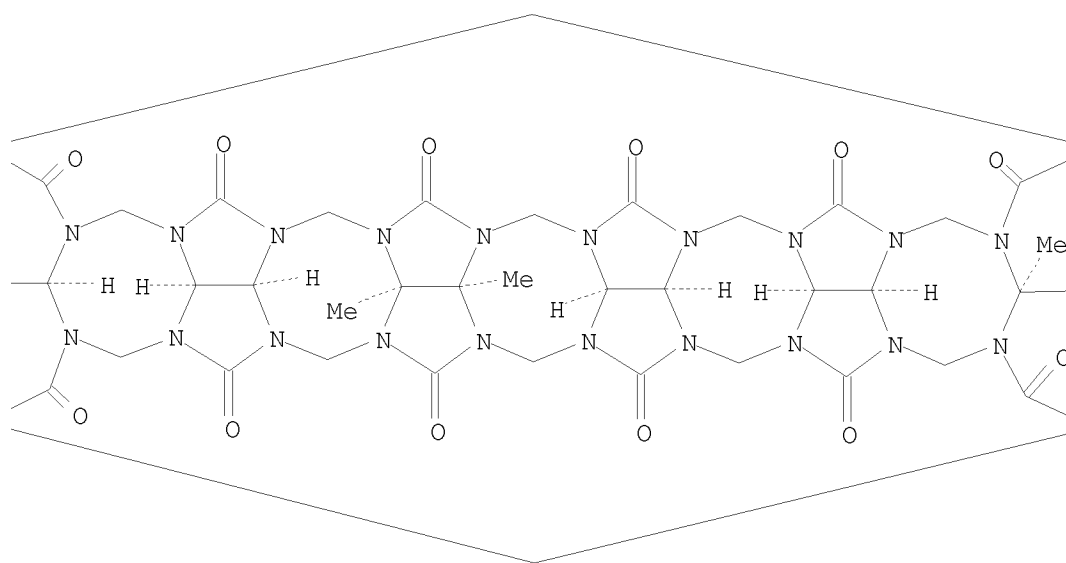
CMF C40 H44 N24 O12

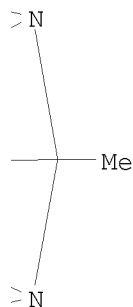
Relative stereochemistry.

PAGE 1-A



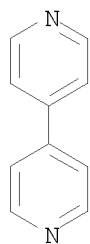
PAGE 1-B





CM 2

CRN 553-26-4
CMF C10 H8 N2



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L4 ANSWER 3 OF 18 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2008:928382 CAPLUS
 DOCUMENT NUMBER: 149:322413
 TITLE: Supramolecular Bracelets and Interlocking Rings
 Elaborated Through the Interrelationship of
 Neighboring Chemical Environments of
 Alkyl-Substitution on Cucurbit[5]uril
 AUTHOR(S): Ni, Xin-Long; Lin, Jing-Xiang; Zheng, Yu-Ying; Wu,
 Wen-Shi; Zhang, Yun-Qian; Xue, Sai-Feng; Zhu,
 Qian-Jiang; Tao, Zhu; Day, Anthony I.
 CORPORATE SOURCE: Key Laboratory of Macrocyclic and Supramolecular
 Chemistry of Guizhou Province, Guizhou University,
 Guiyang, Guizhou, 550025, Peop. Rep. China
 SOURCE: Crystal Growth & Design (2008), 8(9), 3446-3450
 CODEN: CGDEFU; ISSN: 1528-7483
 PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal
 LANGUAGE: English

AB The smallest members of the cucurbituril family, cucurbit[5]uril (L1) and the alkyl-cucurbit[5]urils α, α' -dimethylcucurbit[5]uril (L2) and α, β, δ -tricyclohexanylcucurbit[5]uril (L3), can be used as a building blocks, linked by metal ions to create supramol. rings. Three supramol. complexes, $\{K_2(H_2O@L1)\}[InCl_4(H_2O)_2] \cdot 4.5H_2O$, $\{Sr_2(Cl@L2)\}Cl_3 \cdot 19H_2O$ and $\{K_3(H_2O@L3)\}Cl_2 \cdot 15.5H_2O$, were characterized by x-ray crystallog. The cavities found at the center of these rings have dimensions between 7 and 19 Å in width and 8.5 Å in depth. The partially substituted alkyl-cucurbit[5]urils present the most interesting supramol. ring formation. This occurs as a result of selective coordination of metal ions to the carbonyl oxygens of the glycoluril moieties carrying alkyl substitution.

IT 569359-77-9

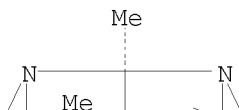
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 (preparation of potassium aqua and strontium chloro supramol. complexes with cucurbit[5]uril and alkyl-cucurbit[5]urils)

RN 569359-77-9 CAPLUS

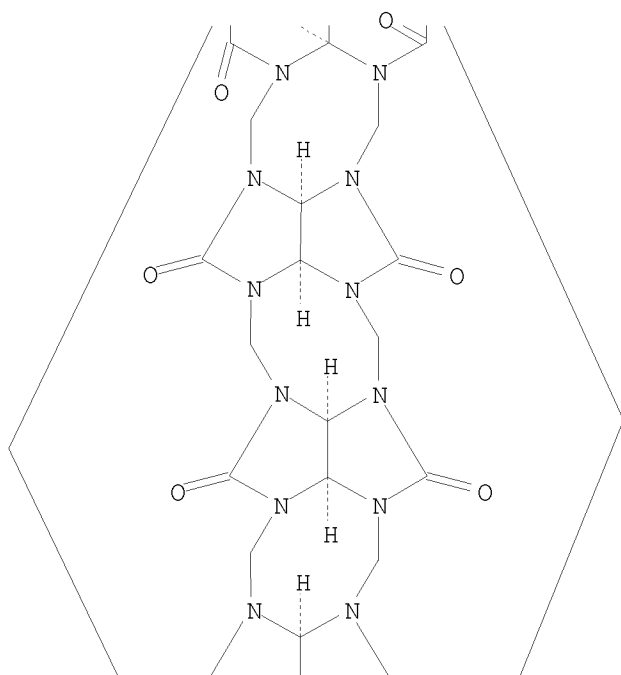
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 2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 13, 14, 15a, 16a, 17a, 18a, 19a, 20a, 21a, 22a-
 eicosaazabispentaleno[1'', 6'':5'', 6'', 7'']cycloocta[1'', 2'', 3'':3', 4']pe
 ntaleno[1', 6':5, 6, 7]cycloocta[1, 2, 3-cd:1', 2', 3'-gh]pentalene-
 1, 4, 6, 8, 10, 12, 15, 17, 19, 21-decone, decahydro-2a, 22b-dimethyl-, stereoisomer
 (CA INDEX NAME)

Relative stereochemistry.

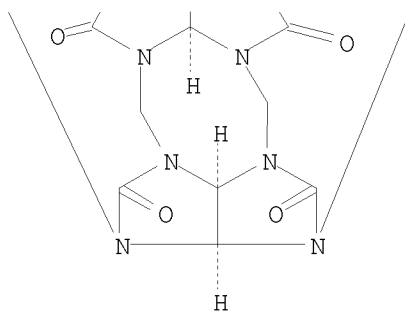
PAGE 1-A



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PAGE 3-A



REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 18 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2008:851115 CAPLUS
 DOCUMENT NUMBER: 149:246169
 TITLE: Supramolecular assemblies based on some new methyl-substituted cucurbit[5]urils through hydrogen bonding
 AUTHOR(S): Lu, Li-Bin; Yu, Da-Hai; Zhang, Yun-Qian; Zhu, Qian-Jiang; Xue, Sai-Feng; Tao, Zhu
 CORPORATE SOURCE: Key Laboratory of Macrocyclic and Supramolecular Chemistry of Guizhou Province, Guizhou University,

SOURCE: Guiyang, 550025, Peop. Rep. China
 Journal of Molecular Structure (2008), 885(1-3), 70-75
 CODEN: JMOSB4; ISSN: 0022-2860
 PUBLISHER: Elsevier B.V.
 DOCUMENT TYPE: Journal
 LANGUAGE: English

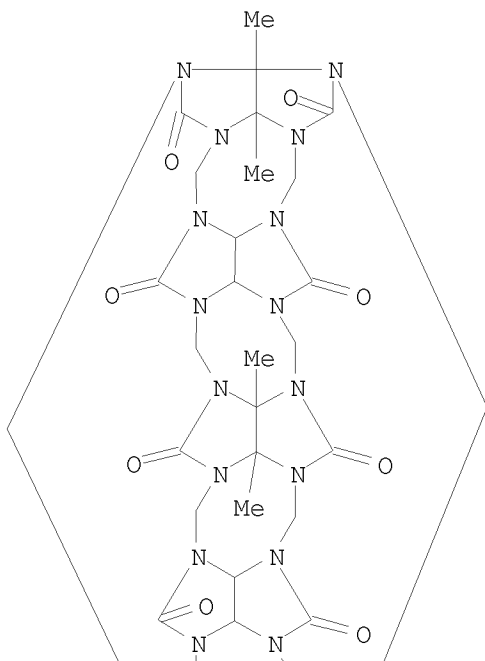
AB Three supramol. assemblies based on three new partial methyl-substituted cucurbit[5]urils, which are tetramethylcucurbit[5]uril (α,γ -TMeQ[5]), hexamethyl cucurbit[5]uril (α,β,δ -HMeQ[5]), nonamethylcucurbit[5]uril (NMeQ[5]), were synthesized and structurally characterized by single-crystal X-ray diffractions. For the comparison with these new Q[5]s, crystal structure of an assembly constructing with normal Q[5] and K₂PtCl₆ was also reported. They are (α,γ -TMeQ[5])·15(H₂O) (1), (α,β,δ -HMeQ[5])·2Cl·2(H₃O)+·7(H₂O) (2), (NMeQ[5])·14(H₂O) (3), (Q[5])₂·[K(H₂O)]₂·[PtCl₆]₂·24(H₂O) (4). In the corresponding crystal structures, the mol. encapsulates included a water mol. and lidded water mols. at both of the portals were observed. Moreover, these mol. encapsulates are connected through hydrogen bonding and formed supramol. chains or joined in pair.

IT 1045861-31-1P 1045861-33-3P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (crystallog.; H-bonded supramol. assemblies based on methyl-substituted cucurbit[5]urils)

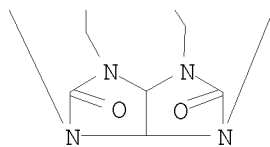
RN 1045861-31-1 CAPLUS

CN 1H, 4H, 12H, 15H-2, 14:3, 13-Dimethano-5H, 6H, 7H, 8H, 9H, 10H, 11H, 16H, 17H, 18H, 19H, 20H, 21H, 22H-2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 13, 14, 15a, 16a, 17a, 18a, 19a, 20a, 21a, 22a-eicosazabispentaleno[1''', 6''':5'', 6'', 7'']cycloocta[1'', 2'', 3'':3', 4']pentaleno[1', 6':5, 6, 7]cycloocta[1, 2, 3-cd:1', 2', 3'-gh]pentalene-1, 4, 6, 8, 10, 12, 15, 17, 19, 21-decone, decahydro-2a, 19b, 19c, 22b-tetramethyl-, hydrate (1:15), stereoisomer (CA INDEX NAME)

PAGE 1-A



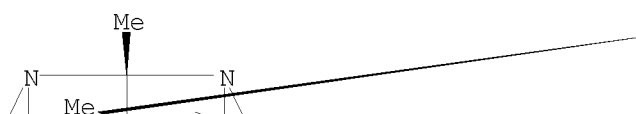
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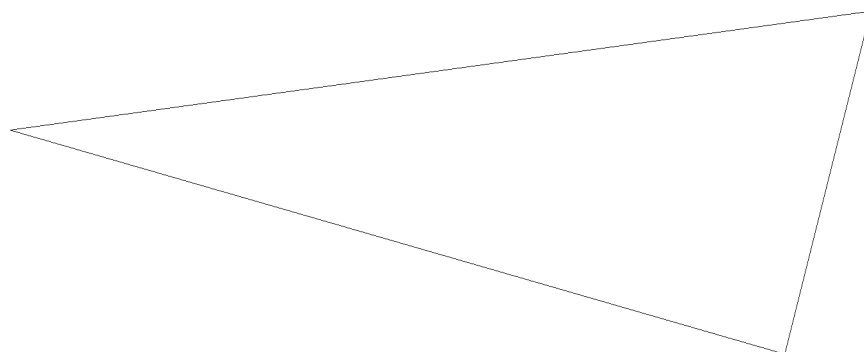
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 5H, 6H, 7H, 8H, 9H, 10H, 11H, 16H, 17H, 18H, 19H, 20H, 21H, 22H-
 2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 13, 14, 15a, 16a, 17a, 18a, 19a, 20a, 21a, 22a-
 eicosaazabispentaleno[1''', 6''':5'', 6'', 7'']cycloocta[1'', 2'', 3'':3', 4']pe
 ntaleno[1', 6':5, 6, 7]cycloocta[1, 2, 3-cd:1', 2', 3'-gh]pentalene-
 1, 4, 6, 8, 10, 12, 15, 17, 19, 21-decone, decahydro-2a, 17b, 17c, 21b, 21c, 22b-
 hexamethyl-, hydrochloride, hydrate (1:2:9), stereoisomer (CA INDEX NAME)

Relative stereochemistry.

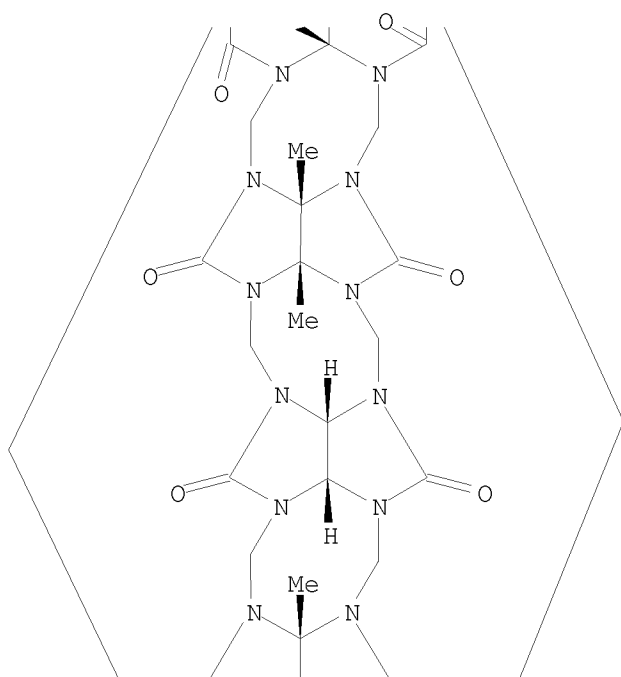
PAGE 1-A



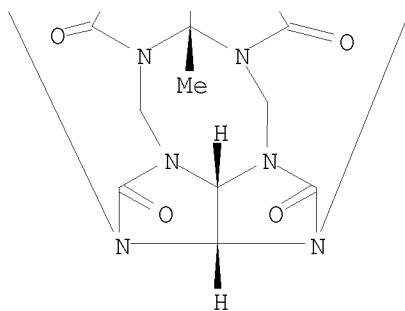
PAGE 1-C



PAGE 2-A

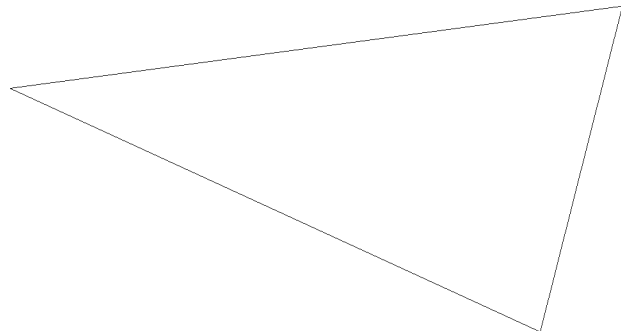


PAGE 3-A



● 2 HCl

● 9 H₂O



REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 18 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:668053 CAPLUS

DOCUMENT NUMBER: 149:214504

TITLE: Structures of supramolecular assemblies formed by some partial substituted cucurbiturils and some metal ion complexes

AUTHOR(S): Yu, Da-Hai; Ni, Xin-Long; Zhang, Yun-Qian; Xue, Sai-Feng; Zhu, Qian-Jiang; Tao, Zhu

CORPORATE SOURCE: Key Laboratory of Macrocyclic and Supramolecular Chemistry of Guizhou Province, Guizhou University, Guiyang, 550025, Peop. Rep. China

SOURCE: Journal of Molecular Structure (2008), 882(1-3), 128-133

CODEN: JMOSB4; ISSN: 0022-2860

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Three supramol. assemblies based on substituted cucurbit[6]uril, α,δ -tetramethylcucurbit[6]uril (TMeQ[6]), $\alpha,\gamma,\varepsilon$ -tricyclohexylcucurbit[6]uril (m-TriCyHQ[6]), and $\alpha,\gamma,\varepsilon$ -hexamethylcucurbit[6]uril (m-HMeQ[6]) with different metal ions were synthesized and structurally characterized by single-crystal x-ray diffractions. They are {TMeQ[6]@acetone[Ca(H₂O)₃]}₂·(CdCl₄)₂·10H₂O (1), {[m-TriCyHQ[6]@dioxane][Na(H₂O)₂Cl]}·15H₂O (2) and {[m-HMeQ[6]]K₂(H₂O)₄Cl}Cl·15H₂O (3). The crystal structures of these complexes showed the different interaction modes between these partial alkyl-substituted cucurbit[6]urils and the metal ions. In compound 1, a 1-dimensional supramol. chain of alternating TMeQ[6] mols. and [Ca(H₂O)₃]²⁺ complexes assembled through coordination bonding of the cation and the carbonyl oxygens of TMeQ[6]. The compound 2 was the 1st reported crystal structure of the m-TriCyHQ[6] with metal ion through the coordinate bonds, and the compound 3 was the 1st reported crystal structure of m-HMeQ[6]. It was unexpected that an ionic bonded chloride anion was at the portal of the two meta-substituted cucurbiturils.

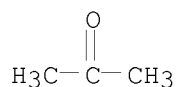
IT 1042142-05-1P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(one-dimensional chain polymer; preparation and crystal and mol. structure)

RN 1042142-05-1 CAPLUS
 CN Calcium(2+), triaqua(dodecahydro-2a,21b,21c,26b-tetramethyl-1H,4H,14H,17H-2,16:3,15-dimethano-5H,6H,7H,8H,9H,10H,11H,12H,13H,18H,19H,20H,21H,22H,23H,24H,25H,26H-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24a,25a,26a-tetracosazabispentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2'',3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-1,4,6,8,10,12,14,17,19,21,23,25-dodecone-κO1,κO17)-, (T-4)-tetrachlorocadmte(2-), compd. with 2-propanone, hydrate (1:1:1:10) (CA INDEX NAME)

CM 1

CRN 67-64-1
 CMF C3 H6 O



CM 2

CRN 1042142-04-0
 CMF C40 H50 Ca N24 O15 . Cd Cl4

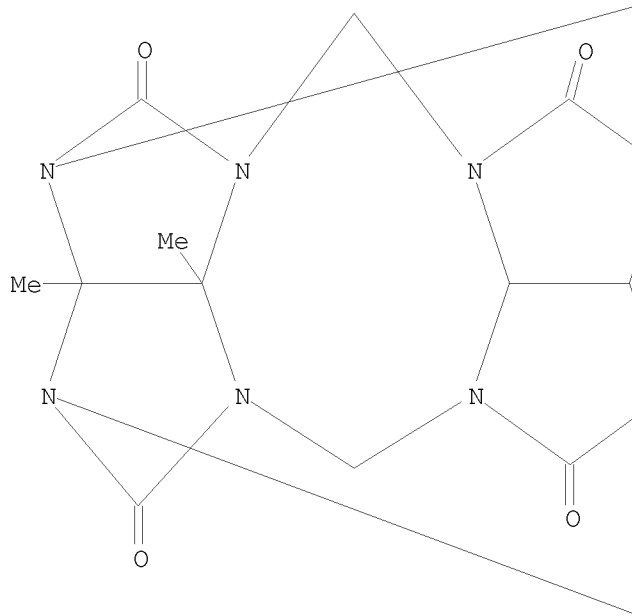
CM 3

CRN 1042142-03-9
 CMF C40 H50 Ca N24 O15
 CCI CCS

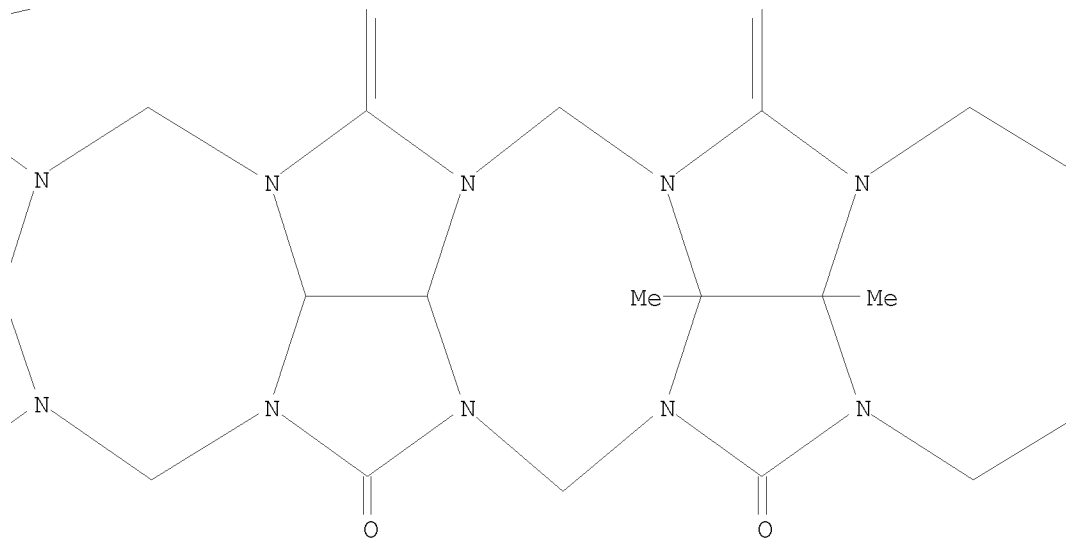
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

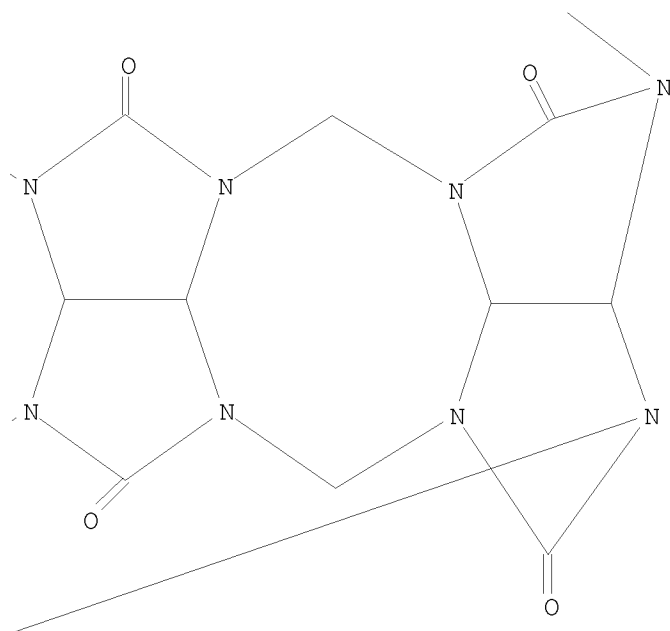
PAGE 2-A



PAGE 2-B



PAGE 2-C



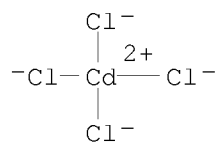
PAGE 3-B

CM 4

CRN 15974-49-9

CMF Cd C14

CCI CCS



IT 640732-36-1 848440-56-2

RL: RCT (Reactant); RACT (Reactant or reagent)

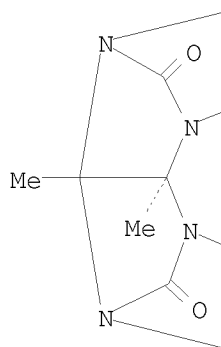
(preparation of calcium, sodium and potassium complexes with substituted cucurbit[6]urils)

RN 640732-36-1 CAPLUS

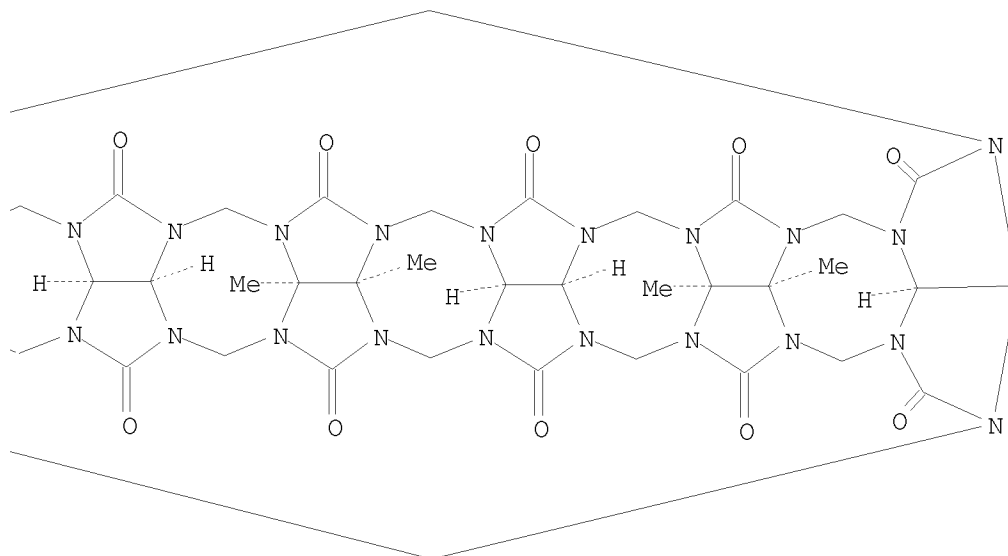
CN 1H,4H,14H,17H-2,16:3,15-Dimethano-
 5H,6H,7H,8H,9H,10H,11H,12H,13H,18H,19H,20H,21H,22H,23H,24H,25H,26H-
 2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24
 a,25a,26a-tetracosazabispentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2''
 ,3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-
 g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-
 1,4,6,8,10,12,14,17,19,21,23,25-dodecone,
 dodecahydro-2a,19b,19c,23b,23c,26b-hexamethyl-, stereoisomer (9CI) (CA
 INDEX NAME)

Relative stereochemistry.

PAGE 1-A



PAGE 1-B



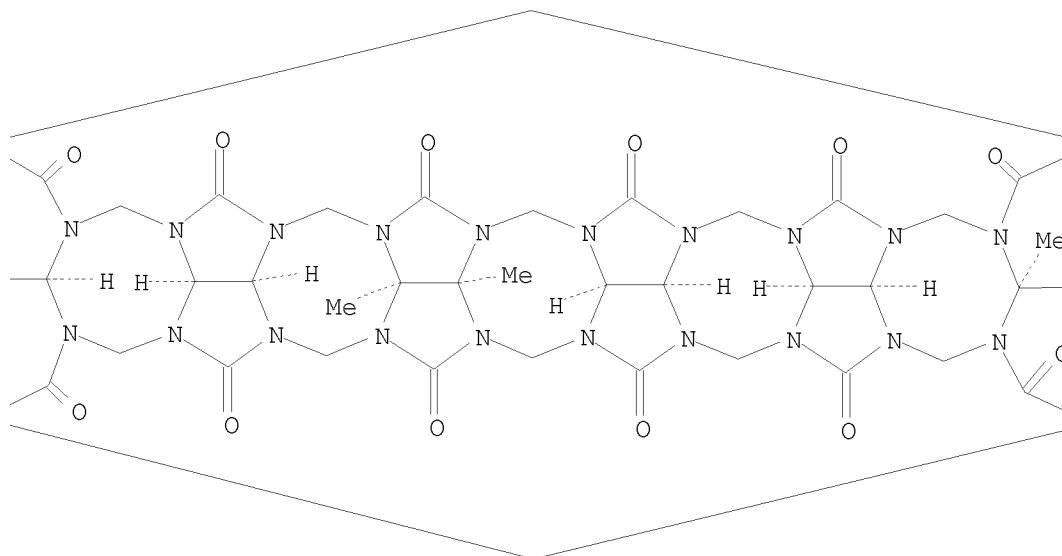
RN 848440-56-2 CAPLUS
 CN 1H,4H,14H,17H-2,16:3,15-Dimethano-
 5H,6H,7H,8H,9H,10H,11H,12H,13H,18H,19H,20H,21H,22H,23H,24H,25H,26H-
 2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24
 a,25a,26a-tetracosazabispentaleno[1''',6'''':5'',6'',7''']cycloocta[1'',2''
 ,3''':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-
 g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-
 1,4,6,8,10,12,14,17,19,21,23,25-dodecone,
 dodecahydro-2a,21b,21c,26b-tetramethyl-, stereoisomer (CA INDEX NAME)

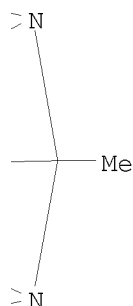
Relative stereochemistry.

PAGE 1-A



PAGE 1-B





REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 18 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:272306 CAPLUS

DOCUMENT NUMBER: 148:508829

TITLE: Structures of supramolecular assemblies formed by substituted cucurbiturils and metal ions

AUTHOR(S): Zhang, Yun-Qian; Zhen, Li-Mei; Yu, Da-Hai; Zhao, Yun-Jie; Xue, Sai-Feng; Zhu, Qian-Jiang; Tao, Zhu

CORPORATE SOURCE: Institute of Applied Chemistry, Guizhou University, Guiyang, 550025, Peop. Rep. China

SOURCE: Journal of Molecular Structure (2008), 875(1-3), 435-441

CODEN: JMOSB4; ISSN: 0022-2860

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 148:508829

AB Four supramol. assemblies based on two partial substituted cucurbituril, α,δ -tetramethylcucurbit[6]uril (TMeQ[6]) and α,δ -dicyclohexanocucurbit[6]uril ((CyH)2Q[6]), with different metal ions were synthesized and structurally characterized by single-crystal x-ray diffractions. They are { [TMeQ[6]@2H2O].cntdot.[Zn(H2O)4]}·[ZnCl4]·12H2O (1), { [TMeQ[6]@H2O].cntdot.[Sr2Cl2]}·cntdot.[Cl]2.cntdot.10H2O (2), { TMeQ[6]·[CaCl]}·[Cl]·17.5H2O (3), { [(CyH)2Q[6]@acetone].cntdot.1.5[Ni(H2O)6]}·(NO3)32H2O (4). The crystal structures of these complexes showed that supramol. chains were formed through different interaction modes. In complex 1, the transition metal ion Zn²⁺ was coordinated not only with H2O mols. but also directly with carbonyl oxygens of a portal of TMeQ[6]. The Zn aqua complexes served as a bridge between TMeQ[6]s in the 1-dimensional supramol. chains. In complex 2, each Sr²⁺ ion was coordinated directly with two carbonyl O atoms at a portal of two TMeQ[6], and each TMeQ[6] was coordinated with

four Sr^{2+} ions, giving supramol. chains consisted of alternating metal ions and $\text{TMeQ}[6]$. In 3, two $\text{TMeQ}[6]$ mols. were coordinated by two Ca^{2+} ions to form a assembled unit. The assembled units were connected through H bonds, giving supramol. chains. In complex 4, supramol. chains consisted of alternating $[\text{Ni}(\text{H}_2\text{O})]^{2+}$ complex cation and $(\text{CyH})_2\text{Q}[6]$ were formed through H bonding.

IT 848440-56-2

RL: RCT (Reactant); RACT (Reactant or reagent)

(for preparation of zinc, strontium, calcium and nickel complexes with substituted cucurbiturils)

RN 848440-56-2 CAPLUS

CN 1H,4H,14H,17H-2,16:3,15-Dimethano-

5H,6H,7H,8H,9H,10H,11H,12H,13H,18H,19H,20H,21H,22H,23H,24H,25H,26H-

2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24a,25a,26a-tetracosazabispentaleno[1'',6'':5'',6'',7'']cycloocta[1'',2'',3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-

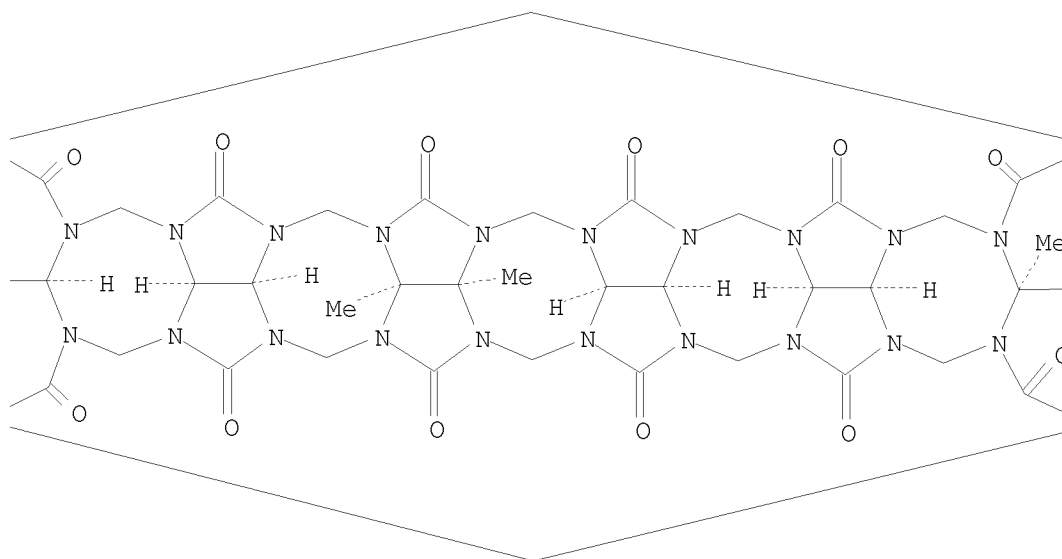
1,4,6,8,10,12,14,17,19,21,23,25-dodecone,
dodecahydro-2a,21b,21c,26b-tetramethyl-, stereoisomer (CA INDEX NAME)

Relative stereochemistry.

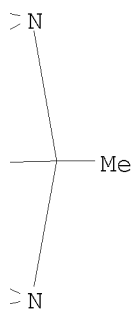
PAGE 1-A



PAGE 1-B



PAGE 1-C

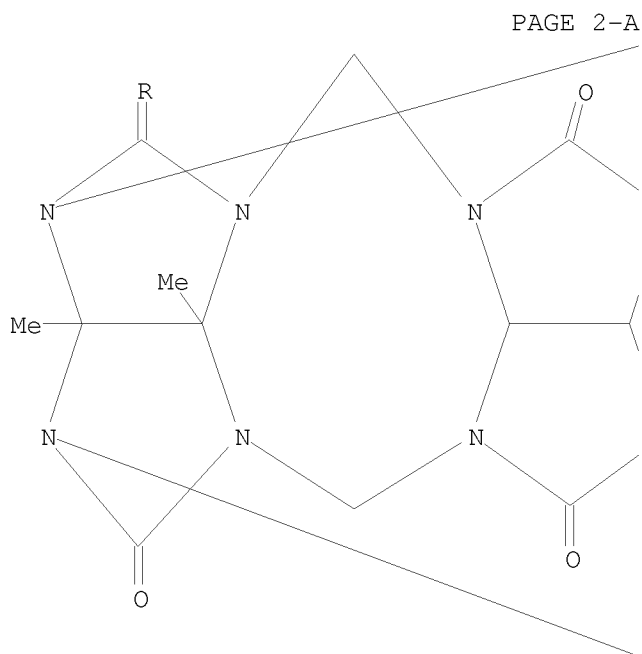


IT 1020725-95-4P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (polymeric; preparation and crystal structure of supramol. complex)
 RN 1020725-95-4 CAPLUS
 CN Strontium, hexaaquatetrachloro[μ-(dodecahydro-2a,21b,21c,26b-
 tetramethyl-1H,4H,14H,17H-2,16:3,15-dimethano-
 5H,6H,7H,8H,9H,10H,11H,12H,13H,18H,19H,20H,21H,22H,23H,24H,25H,26H-
 2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24
 a,25a,26a-tetracosazabispentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2''
 ,3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-
 g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-

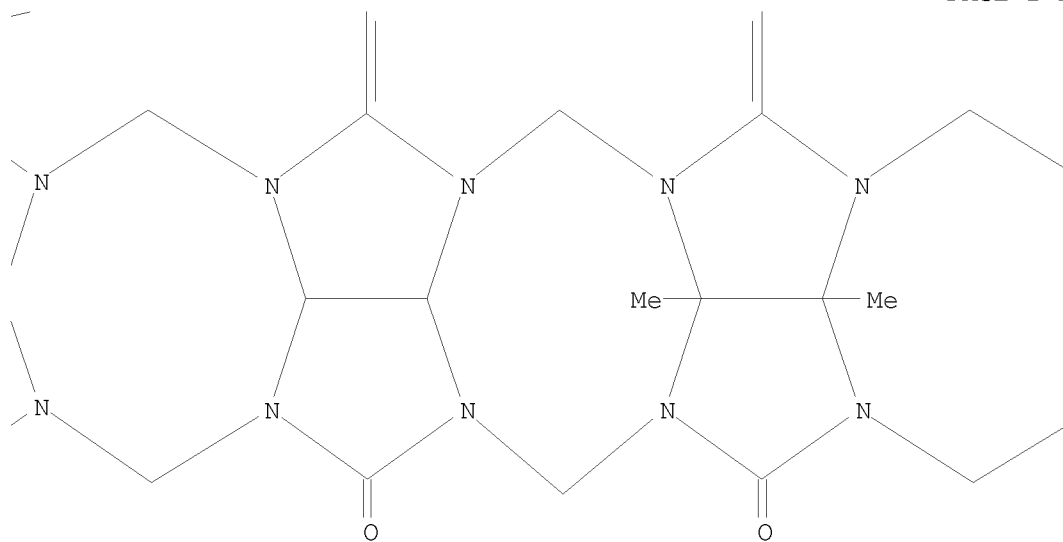
1,4,6,8,10,12,14,17,19,21,23,25-dodecone-
κO1,κO17:κO21)]di-, hydrate (1:14) (CA INDEX NAME)

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

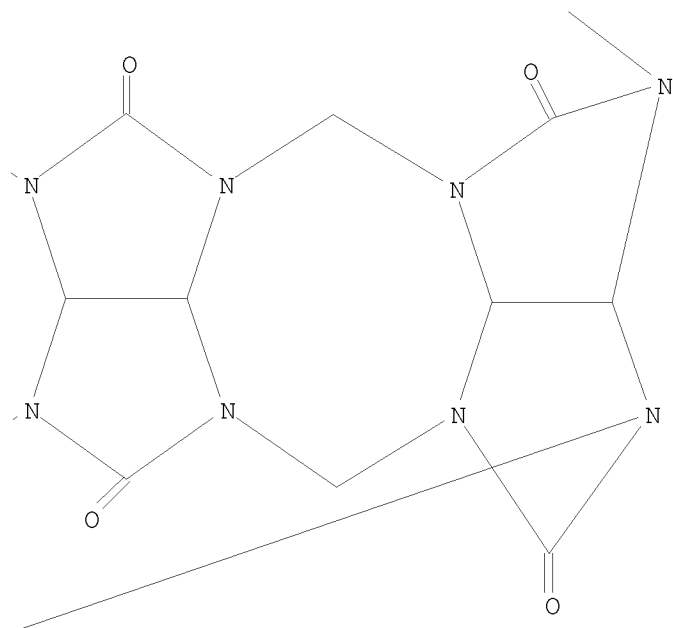
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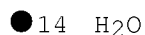
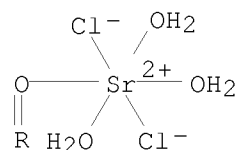


PAGE 2-B



PAGE 2-C





IT 1020725-94-3P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (preparation and crystal structure of supramol. complex)
 RN 1020725-94-3 CAPLUS
 CN Zinc(2+), tetraaqua(dodecahydro-2a,21b,21c,26b-tetramethyl-1H,4H,14H,17H-
 2,16:3,15-dimethano-5H,6H,7H,8H,9H,10H,11H,12H,13H,18H,19H,20H,21H,22H,23H
 ,24H,25H,26H-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,2
 1a,22a,23a,24a,25a,26a-tetracosazabispentaleno[1''',6''':5'',6'',7'']cycl
 oocta[1'',2'',3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-
 g'h']cycloocta[1,2,3-cd:5,6,7-c'd'd']dipentalene-
 1,4,6,8,10,12,14,17,19,21,23,25-dodecone-κO1,κO17)-,
 (OC-6-22)-, (T-4)-tetrachlorozincate(2-), hydrate (1:1:14) (CA INDEX
 NAME)

CM 1

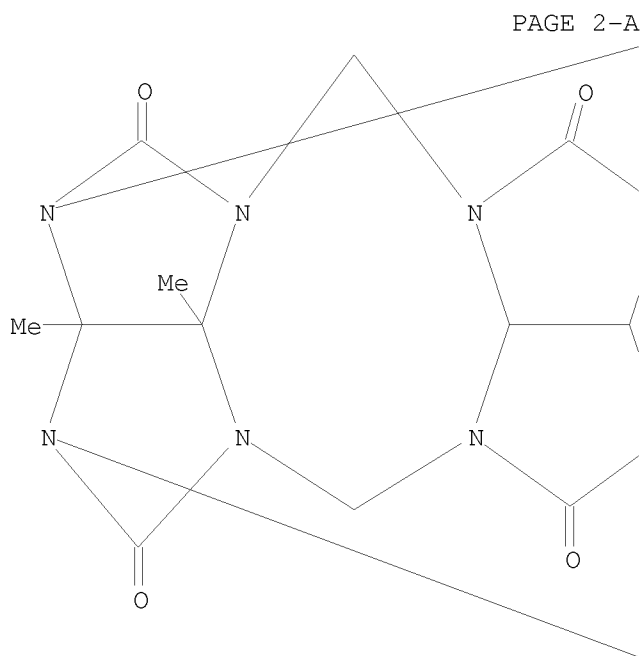
CRN 1020725-93-2
 CMF C40 H52 N24 O16 Zn . Cl4 Zn

CM 2

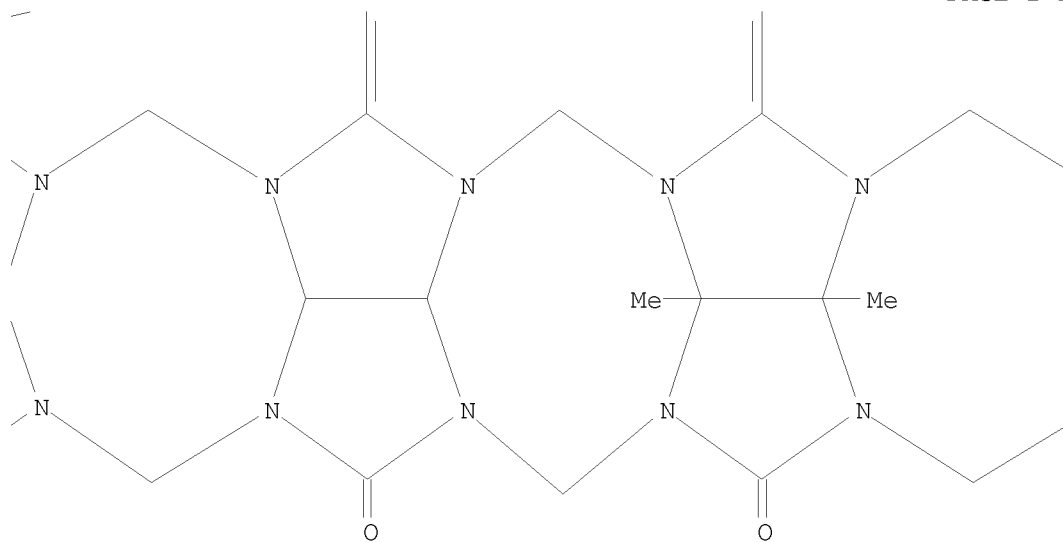
CRN 1020725-92-1
 CMF C40 H52 N24 O16 Zn
 CCI CCS

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

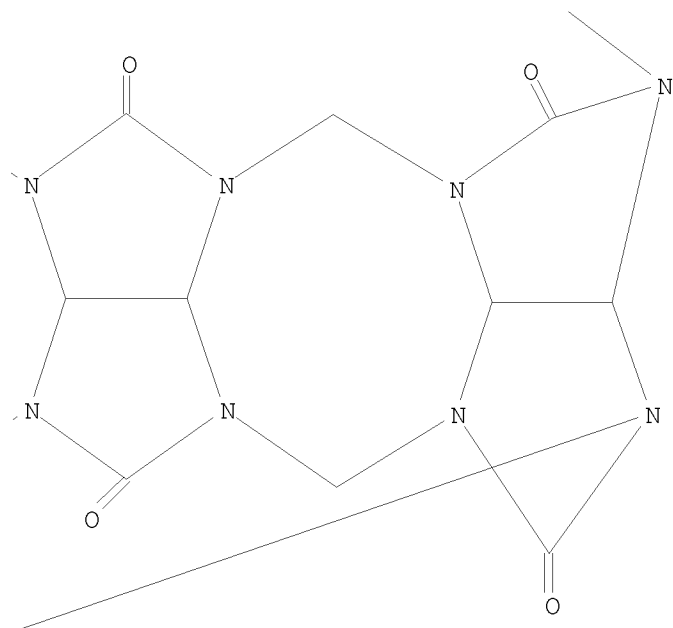
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PAGE 2-B



PAGE 2-C

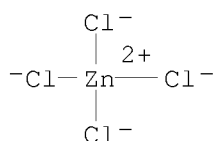


CM 3

CRN 15201-05-5

CMF C14 Zn

CCI CCS



REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 18 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:111164 CAPLUS

DOCUMENT NUMBER: 148:262631

TITLE: Method for synthesis of cucurbit[n]urils and substituted cucurbit[n]urils compounds

INVENTOR(S): Xue, Saifeng; Zhu, Qianjiang; Tao, Zhu

PATENT ASSIGNEE(S): Guizhou University, Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 10pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent

LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 101108851	A	20080123	CN 2007-10077837	20070711
PRIORITY APPLN. INFO.:			CN 2007-10077837	20070711

AB The method comprises react glycoluril dimer with an epoxy glycoluril or an epoxy glycoluril derivative and formaldehyde in ratio 1:0-4:0-4 in hydrochloric acid at 90-100° for 1-2 h, concentrating, filtrating, separating and purifying to form cucurbit[n]urils or substituted cucurbit[n]urils, wherein the content of epoxy glycoluril or its derivative and formaldehyde is not simultaneously 0. The formaldehyde can be replaced by hexamethylenetetramine or polyformaldehyde; HCl can be replaced by sulfuric acid. With the method, the distribution of cucurbit[n]urils in product and the amount and position of substations groups in cucurbit[n]urils can be easily controlled.

IT 848440-56-2P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(method for synthesis of cucurbit[n]urils and substituted cucurbit[n]urils compds.)

RN 848440-56-2 CAPLUS

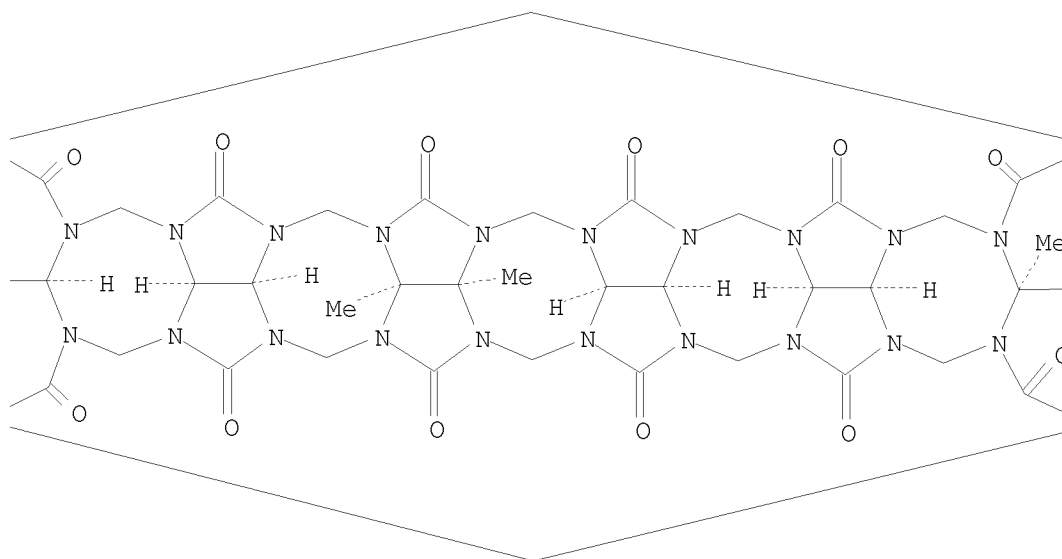
CN 1H,4H,14H,17H-2,16:3,15-Dimethano-
5H,6H,7H,8H,9H,10H,11H,12H,13H,18H,19H,20H,21H,22H,23H,24H,25H,26H-
2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24
a,25a,26a-tetracosazabispentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2''
,3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-
g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-
1,4,6,8,10,12,14,17,19,21,23,25-dodecone,
dodecahydro-2a,21b,21c,26b-tetramethyl-, stereoisomer (CA INDEX NAME)

Relative stereochemistry.

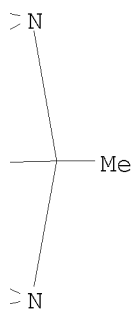
PAGE 1-A



PAGE 1-B



PAGE 1-C



L4 ANSWER 8 OF 18 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2007:1339803 CAPLUS
 DOCUMENT NUMBER: 148:561422
 TITLE: Studies of the interaction of
 tetramethylcucurbit[6]uril and
 5,5'-dimethyl-2,2'-bipyridyl hydrochloride
 AUTHOR(S): Cong, Hang; Zhao, Yun-Jie; Xue, Sai-Feng; Tao, Zhu;
 Zhu, Qian-Jiang
 CORPORATE SOURCE: Institute of Applied Chemistry, Guizhou University,
 Guiyang, 550025, Peop. Rep. China

SOURCE: Journal of Molecular Modeling (2007), 13(12),
1221-1226
CODEN: JMMOFK; ISSN: 0948-5023
URL: <http://www.springerlink.com/content/x6nwlj3949222664/fulltext.pdf>

PUBLISHER: Springer GmbH

DOCUMENT TYPE: Journal; (online computer file)

LANGUAGE: English

AB The interaction between tetramethylcucurbit[6]uril (host) and
5,5'-dimethyl-2,2'-bipyridyl hydrochloride (guest) was studied by 1H NMR,
x-ray crystallog., electronic absorption spectroscopy, fluorescence
emission spectra and quantum chemical calcns. This exptl.-computational
study that indicated the host can orientationally encapsulate the guest
with a moderate association constant value. Computation qual. explained the
split UV-visible absorption peak of the inclusion complex.

IT 1026700-36-6
RL: FMU (Formation, unclassified); PEP (Physical, engineering or chemical
process); PRP (Properties); FORM (Formation, nonpreparative); PROC
(Process)
(interaction of tetramethylcucurbit[6]uril host and
5,5'-dimethyl-2,2'-bipyridyl hydrochloride guest)

RN 1026700-36-6 CAPLUS

CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-
5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-
2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24
a, 25a, 26a-tetracosazabispentaleno[1''', 6''':5'', 6'', 7'']cycloocta[1'', 2''
, 3'':3', 4']pentaleno[1', 6':5, 6, 7]cycloocta[1, 2, 3-gh:1', 2', 3'-
g'h']cycloocta[1, 2, 3-cd:5, 6, 7-c'd']dipentalene-
1, 4, 6, 8, 10, 12, 14, 17, 19, 21, 23, 25-dodecone,
dodecahydro-2a, 21b, 21c, 26b-tetramethyl-, stereoisomer, compd. with
5,5'-dimethyl-2,2'-bipyridine hydrochloride, hydrate (1:1:1:?) (CA INDEX
NAME)

CM 1

CRN 848440-56-2

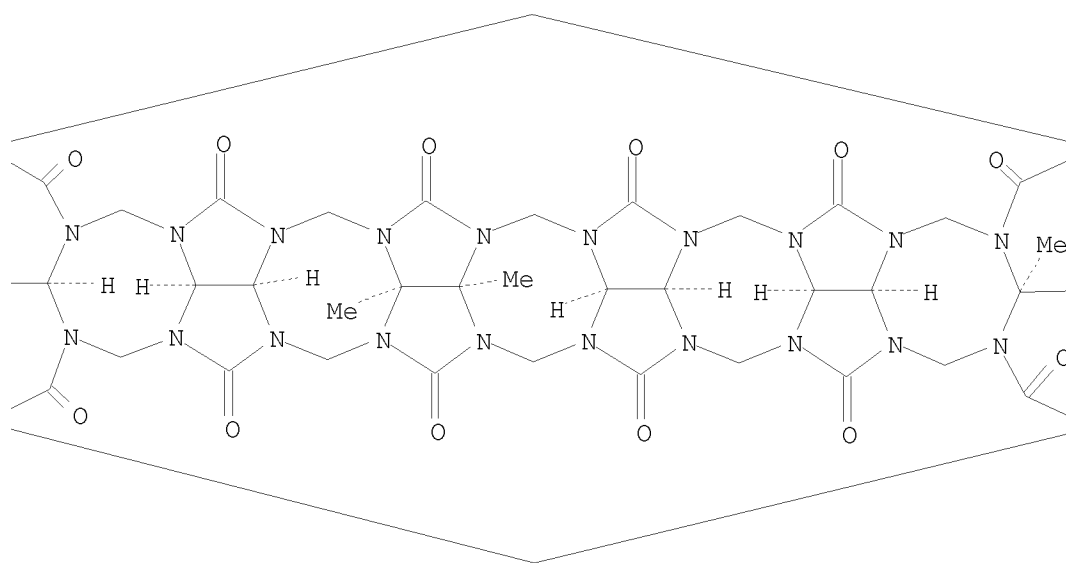
CMF C40 H44 N24 O12

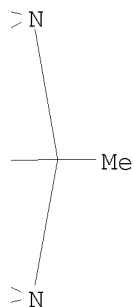
Relative stereochemistry.

PAGE 1-A



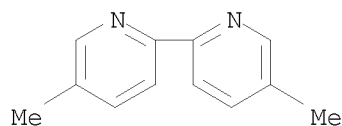
PAGE 1-B





CM 2

CRN 1762-34-1
CMF C12 H12 N2



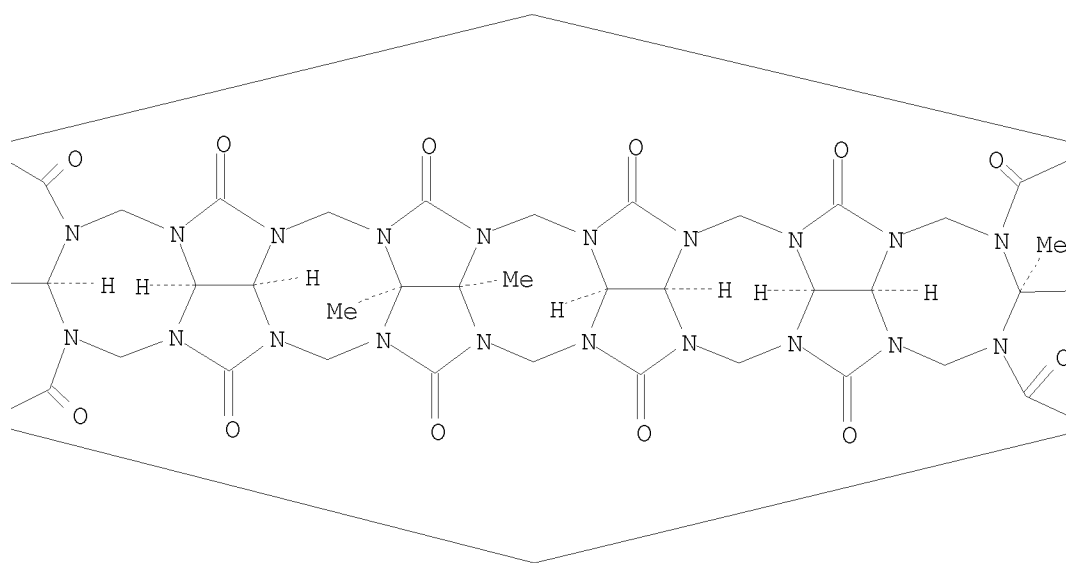
IT 848440-56-2
 RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)
 (interaction of tetramethylcucurbit[6]uril host and
 5,5'-dimethyl-2,2'-bipyridyl hydrochloride guest)
 RN 848440-56-2 CAPLUS
 CN 1H,4H,14H,17H-2,16:3,15-Dimethano-
 5H,6H,7H,8H,9H,10H,11H,12H,13H,18H,19H,20H,21H,22H,23H,24H,25H,26H-
 2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24
 a,25a,26a-tetracosazabispentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2''
 ,3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-
 g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-
 1,4,6,8,10,12,14,17,19,21,23,25-dodecone,
 dodecahydro-2a,21b,21c,26b-tetramethyl-, stereoisomer (CA INDEX NAME)

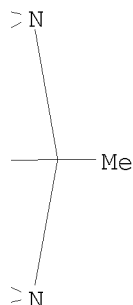
Relative stereochemistry.

PAGE 1-A



PAGE 1-B





REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 18 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:508326 CAPLUS

DOCUMENT NUMBER: 147:165907

TITLE: Synthesis and X-ray structure of the inclusion complex of dodecamethylcucurbit[6]uril with 1,4-dihydroxybenzene

AUTHOR(S): Lu, Li-Bin; Zhang, Yun-Qian; Zhu, Qian-Jiang; Xue, Sai-Feng; Tao, Zhu

CORPORATE SOURCE: Institute of Applied Chemistry, Guizhou University, Guiyang, 550025, Peop. Rep. China

SOURCE: Molecules (2007), 12(4), 716-722

CODEN: MOLEFW; ISSN: 1420-3049

URL: <http://www.mdpi.org/molecules/papers/12040716.pdf>

PUBLISHER: Molecular Diversity Preservation International

DOCUMENT TYPE: Journal; (online computer file)

LANGUAGE: English

OTHER SOURCE(S): CASREACT 147:165907

AB The synthesis, and x-ray crystal structure of the inclusion host-guest complex of dodecamethylcucurbit[6]uril (DDMeQ[6]) with 1,4-dihydroxybenzene (DHOBEN) are reported. The complex crystallizes in the space group P21/c with $a = 12.2847(4)$, $b = 12.6895(4)$, $c = 15.1310(4)$ Å, $\alpha = 74.6960(10)^\circ$, $\beta = 71.4090(10)^\circ$, $\gamma = 86.5090(10)^\circ$ and $Z = 1$. A novel approach to dodecamethylcucurbit[6]uril synthesis is also described. To sep. dodecamethylcucurbit[6]uril, 1,4-dihydroxybenzene is used as a guest mol. for crystallization of the fully methyl-substituted cucurbituril. The driving force for the self-assembled inclusion host-guest complex can be attributed to not only the cavity interaction of dodecamethylcucurbit[6]uril (host), but also to the hydrogen bonding between the carbonyl oxygen at the portals of the host and the hydroxy groups of the guest.

IT 569359-77-9

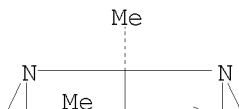
RL: PRP (Properties)

(preparation and X-ray structure of inclusion complex of

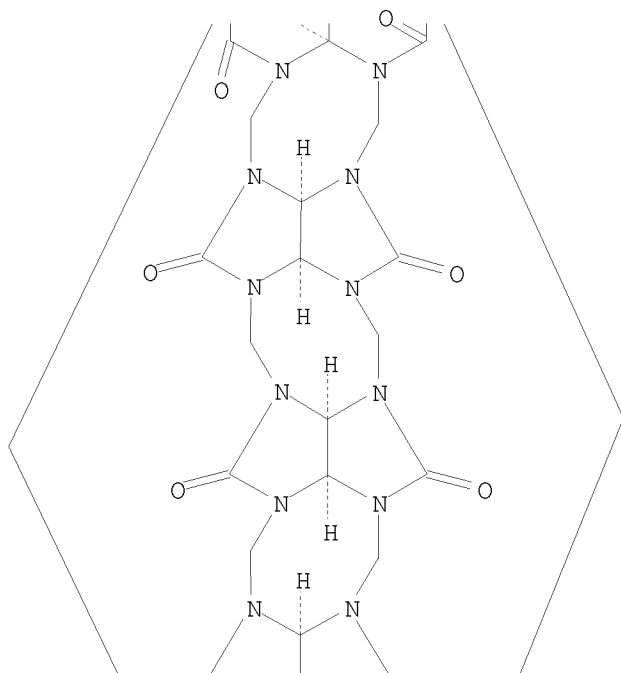
dodecamethylcucurbit[6]uril with 1,4-dihydroxybenzene)
 RN 569359-77-9 CAPLUS
 CN 1H,4H,12H,15H-2,14:3,13-Dimethano-
 5H,6H,7H,8H,9H,10H,11H,16H,17H,18H,19H,20H,21H,22H-
 2,3,4a,5a,6a,7a,8a,9a,10a,11a,13,14,15a,16a,17a,18a,19a,20a,21a,22a-
 eicosaazabispentaleno[1'',6'':5'',6'',7'']cycloocta[1'',2'',3'':3',4']pe
 ntaleno[1',6':5,6,7]cycloocta[1,2,3-cd:1',2',3'-gh]pentalene-
 1,4,6,8,10,12,15,17,19,21-decone, decahydro-2a,22b-dimethyl-, stereoisomer
 (CA INDEX NAME)

Relative stereochemistry.

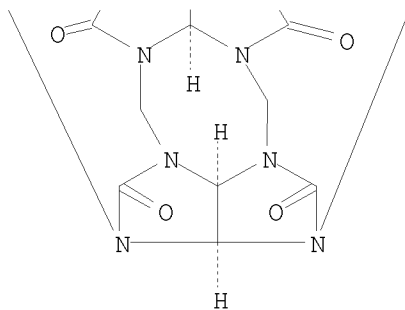
PAGE 1-A



PAGE 2-A



PAGE 3-A



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 18 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2007:408339 CAPLUS
 DOCUMENT NUMBER: 147:52550
 TITLE: Interaction between Tetramethylcucurbit[6]uril and Some Pyridine Derivates
 AUTHOR(S): Cong, Hang; Tao, Long-Ling; Yu, Yi-Hua; Tao, Zhu; Yang, Fan; Zhao, Yun-Jie; Xue, Sai-Feng; Lawrance, Geoffrey A.; Wei, Gang
 CORPORATE SOURCE: Institute of Applied Chemistry, Guizhou University, Guiyang, Guizhou, 550025, Peop. Rep. China

SOURCE: Journal of Physical Chemistry A (2007), 111(14),
2715-2721

CODEN: JPCAFH; ISSN: 1089-5639

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Interaction between tetramethylcucurbit[6]uril (TMeQ[6], host) with hydrochloride salts of 2-phenylpyridine (G1), 2-benzylpyridine (G2), and 4-benzylpyridine (G3) (guests) have been investigated by using ¹H NMR spectroscopy and electronic absorption spectroscopy and theor. calcns. The ¹H NMR spectra anal. established an interaction model in which the host selectively included the Ph moiety of the HCl salt of the above three guests, and formed inclusion complexes with a host-guest ratio of 1:1. Absorption spectrophotometric anal. allowed quant. measurement of the stability of these host-guest inclusion complexes. Particularly, we have established a competitive interaction in which one host-guest inclusion complex pair is much more stable than another host-guest inclusion complex pair. The stability consts. for the three host-guest inclusion complexes of TMeQ[6]-G1, TMeQ[6]-G2, and TMeQ[6]-G3 are .apprx.2 + 106, 60.7, and 19.9 mol⁻¹·L, resp. To understand how subtle differences in the structure of the title guests lead to a significant difference in the stability of the corresponding host-guest inclusion complexes with the TMeQ[6], ab initio theor. calcns. have been performed, not only for the gas phase but also the solution phase (water as solvent) in all cases. The calcn. results revealed that when the Ph moiety of the three pyridine derivate guests was included, the host-guest complexation reached the min., and the corresponding energy differences for the formation of the title host-guest inclusion complexes are qual. consistent with the exptl. results.

IT 848440-56-2 939823-44-6 939823-46-8
939823-48-0

RL: PRP (Properties)

(interaction between tetramethylcucurbit[6]uril and some pyridine derivatives)

RN 848440-56-2 CAPLUS

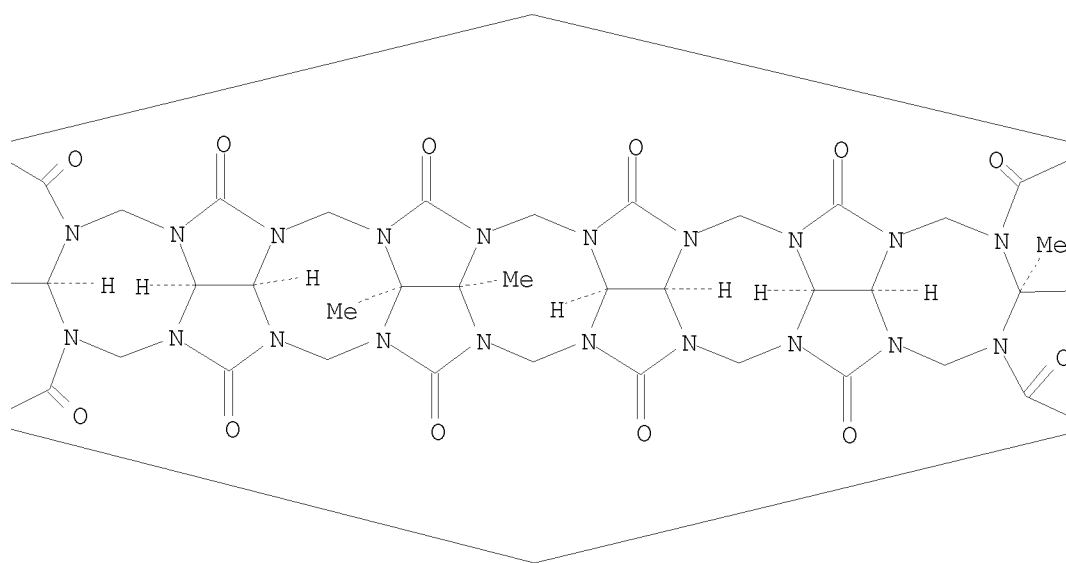
CN 1H,4H,14H,17H-2,16:3,15-Dimethano-
5H,6H,7H,8H,9H,10H,11H,12H,13H,18H,19H,20H,21H,22H,23H,24H,25H,26H-
2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24
a,25a,26a-tetracosazabispentaleno[1'',6'':5'',6'',7'']cycloocta[1'',2'',
3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-
g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-
1,4,6,8,10,12,14,17,19,21,23,25-dodecone,
dodecahydro-2a,21b,21c,26b-tetramethyl-, stereoisomer (CA INDEX NAME)

Relative stereochemistry.

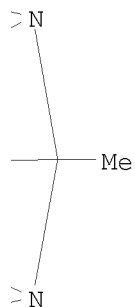
PAGE 1-A



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PAGE 1-C



RN 939823-44-6 CAPLUS
 CN 1H,4H,14H,17H-2,16:3,15-Dimethano-
 5H,6H,7H,8H,9H,10H,11H,12H,13H,18H,19H,20H,21H,22H,23H,24H,25H,26H-
 2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24
 a,25a,26a-tetracosazabispentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2''
 ,3''':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-
 g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-
 1,4,6,8,10,12,14,17,19,21,23,25-dodecone,
 dodecahydro-2a,21b,21c,26b-tetramethyl-, stereoisomer, compd. with
 2-phenylpyridine (2:5) (CA INDEX NAME)

CM 1

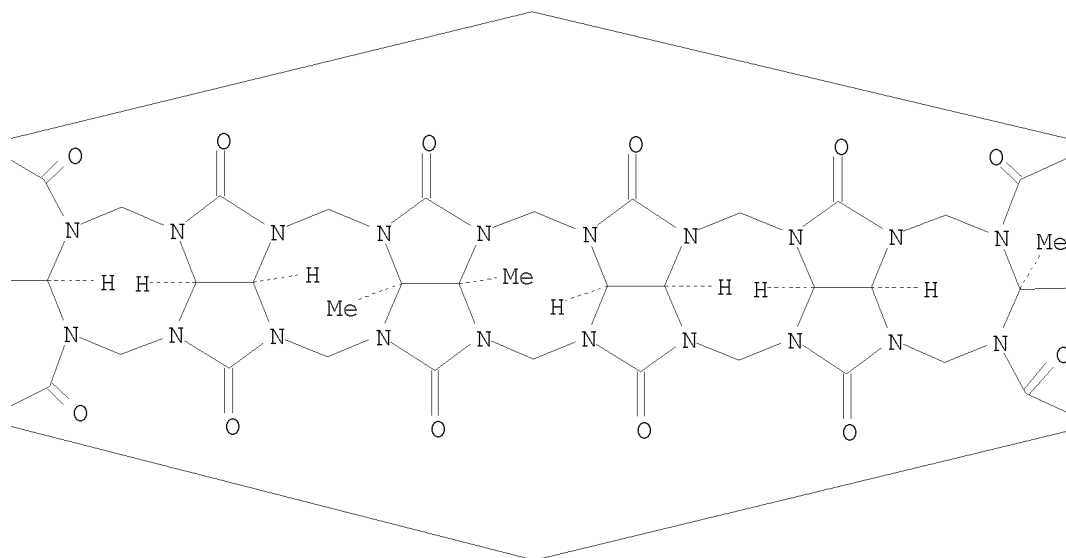
CRN 848440-56-2
 CMF C40 H44 N24 O12

Relative stereochemistry.

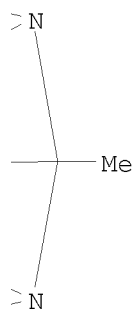
PAGE 1-A



PAGE 1-B



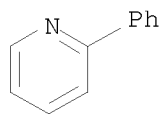
PAGE 1-C



CM 2

CRN 1008-89-5

CMF C11 H9 N



RN 939823-46-8 CAPLUS
 CN 1H,4H,14H,17H-2,16:3,15-Dimethano-
 5H,6H,7H,8H,9H,10H,11H,12H,13H,18H,19H,20H,21H,22H,23H,24H,25H,26H-
 2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24
 a,25a,26a-tetracosazabispentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2''
 ,3''':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-
 g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-
 1,4,6,8,10,12,14,17,19,21,23,25-dodecone,
 dodecahydro-2a,21b,21c,26b-tetramethyl-, stereoisomer, compd. with
 2-(phenylmethyl)pyridine (2:5) (CA INDEX NAME)

CM 1

CRN 848440-56-2

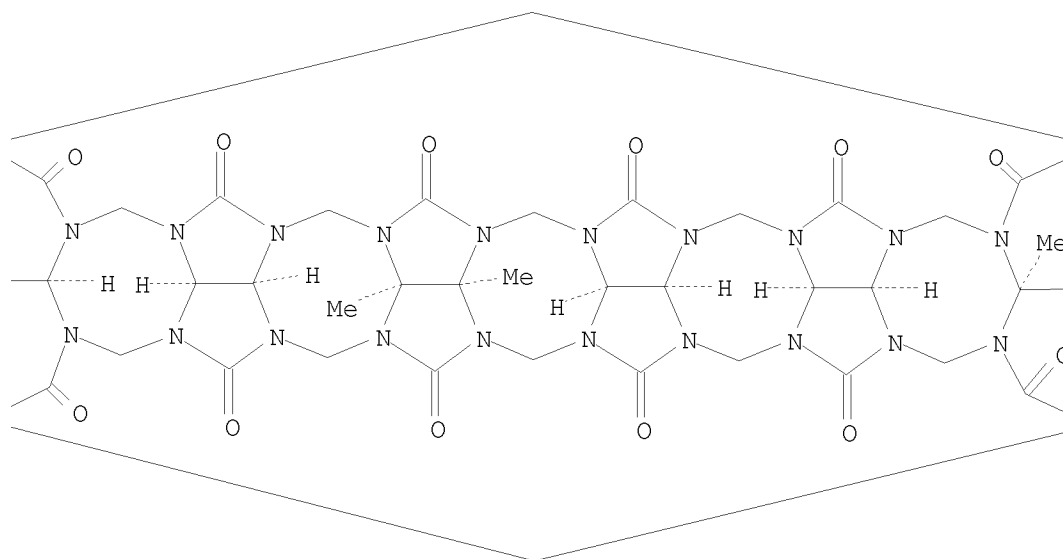
CMF C40 H44 N24 O12

Relative stereochemistry.

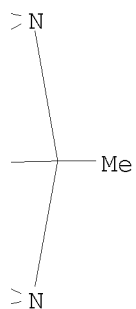
PAGE 1-A



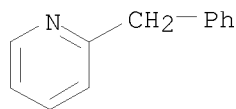
PAGE 1-B



PAGE 1-C



CM 2
CRN 101-82-6
CMF C12 H11 N



RN 939823-48-0 CAPLUS
 CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-
 5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-
 2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24
 a, 25a, 26a-tetracosazabispentaleno[1''', 6''':5'', 6'', 7'']cycloocta[1'', 2''
 , 3'':3', 4']pentaleno[1', 6':5, 6, 7]cycloocta[1, 2, 3-gh:1', 2', 3'-
 g'h']cycloocta[1, 2, 3-cd:5, 6, 7-c'd']dipentalene-
 1, 4, 6, 8, 10, 12, 14, 17, 19, 21, 23, 25-dodecone,
 dodecahydro-2a, 21b, 21c, 26b-tetramethyl-, stereoisomer, compd. with
 4-(phenylmethyl)pyridine (2:5) (CA INDEX NAME)

CM 1

CRN 848440-56-2

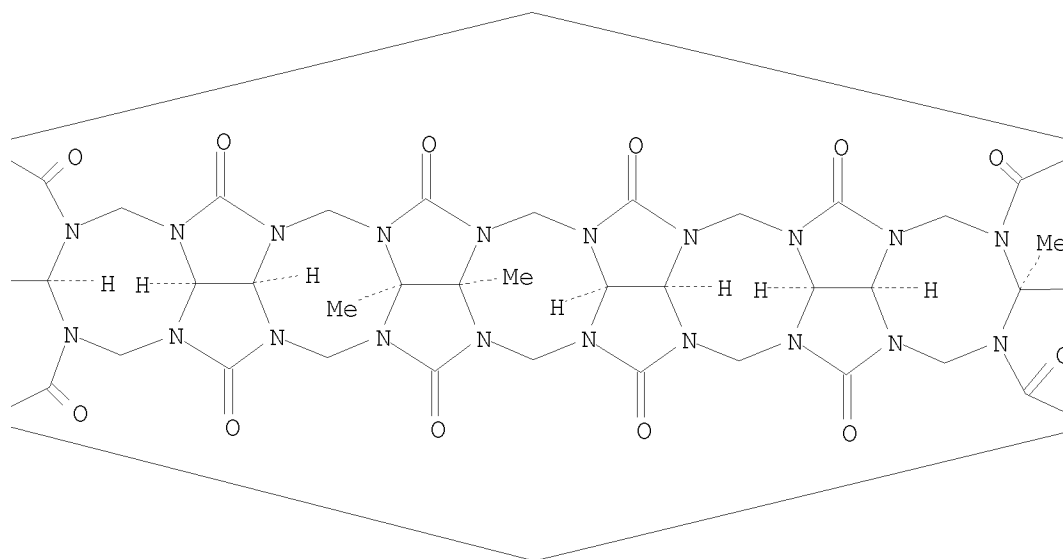
CMF C40 H44 N24 O12

Relative stereochemistry.

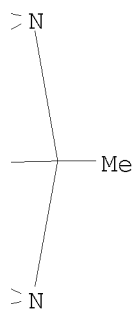
PAGE 1-A



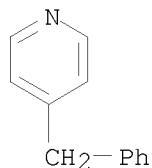
PAGE 1-B



PAGE 1-C



CM 2
CRN 2116-65-6
CMF C12 H11 N



REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 11 OF 18 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:404036 CAPLUS

DOCUMENT NUMBER: 144:450383

TITLE: Interaction between three cucurbiturils and hydrochloride salts of 4,4'-dipyridyl and its derivatives

AUTHOR(S): Mu, Lan; Xue, Sai-Feng; Du, Ying; Zhao, Yun-Jie; Zhu, Qian-Jiang; Tao, Zhu

CORPORATE SOURCE: Inst. Appl. Chem., Guizhou Univ., Guiyang, 550025, Peop. Rep. China

SOURCE: Gaodeng Xuexiao Huaxue Xuebao (2006), 27(4), 654-659
CODEN: KTHPDM; ISSN: 0251-0790

PUBLISHER: Gaodeng Jiaoyu Chubanshe

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

AB In this paper, the host-guest relationship between a general cucurbit[n = 7]uril(Q[7]) or a new ellipsoid-host - sym. tetramethyl-cucurbituril (TMeQ[6]) with hydrochloride salts of 4,4'-dipyridyl(44) or N,N'-dimethyl-4,4'-dipyridyl(dm44) was examined for confirming the interaction between cucurbituril(Q[6]) and these guests. The exptl. results revealed that Q[7] included the 4,4'-dipyridyl part of this kind of guests which were inclined in the cavity of Q[7]. The results based on 1H NMR technique, cyclic voltammetric method and UV absorption spectrophotometric measurement revealed that strong interaction existed between TMeQ[6] and guest 44 or dm44 and a one-dimensional assembled superamol. could be formed. 1H NMR technique and cyclic voltammetric method showed no obvious interaction between Q[6] with the guest 44 and its derivative, however, UV absorption spectrophotometric measurements revealed that a kind of interaction did occur; comparing the structural characteristic of Q[6] to TMeQ[6], a one-dimensional assembled superamol. could be also formed between Q[6] and guest 44 and its derivative

IT 848440-56-2

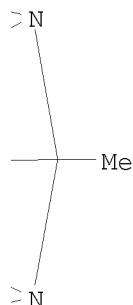
RL: PRP (Properties)

(interaction between three cucurbiturils and hydrochloride salts of 4,4'-dipyridyl and N,N'-dimethyl-4,4'-dipyridinium)

RN 848440-56-2 CAPLUS

CN 1H,4H,14H,17H-2,16:3,15-Dimethano-
5H,6H,7H,8H,9H,10H,11H,12H,13H,18H,19H,20H,21H,22H,23H,24H,25H,26H-
2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24
a,25a,26a-tetracosazabispentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2''
,3''':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-
g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-
1,4,6,8,10,12,14,17,19,21,23,25-dodecone,
dodecahydro-2a,21b,21c,26b-tetramethyl-, stereoisomer (CA INDEX NAME)

The diagram shows a segment of a polyimide chain. The backbone consists of repeating units of imide rings connected by methylene groups. The structure is enclosed in a large, light-gray parallelogram. Hydrogen atoms (H) and methyl groups (Me) are shown interacting with the carbonyl groups of the imide rings. Dashed lines indicate these interactions: H...O, Me...O, and H...O. The chain is shown in a perspective view, with the top and bottom edges of the parallelogram converging towards a vanishing point.



L4 ANSWER 12 OF 18 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:1142893 CAPLUS

DOCUMENT NUMBER: 144:323501

TITLE: Synthesis and crystal structure of a novel self-assembled 1,4-dimethyl cucurbituril silver(I) complex

AUTHOR(S): Zhang, Yun-Qian; Tao, Zhu; Zhao, Yun-Jie; Xue, Sai-Feng; Zhu, Qian-Jiang; Wei, Zhan-Bing; Long, La-Sheng

CORPORATE SOURCE: Institute of Applied Chemistry, Guizhou University, Guiyang, 550025, Peop. Rep. China

SOURCE: Wuji Huaxue Xuebao (2005), 21(10), 1576-1582

CODEN: WHUXEO; ISSN: 1001-4861

PUBLISHER: Wuji Huaxue Xuebao Bianjibu

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

OTHER SOURCE(S): CASREACT 144:323501

AB Crystals of a new 1,4-di-Me cucurbituril (TMeQ [6]) with Silver(I) ion were synthesized, and the structure was determined by X-ray diffraction technique. There are two kinds of TMeQ[6] A and B which formed mol. encapsulates with two silver ion lids in the self-assembled entities. One dimensional supramol. tubes are formed from the encapsulates A, and two dimensional mol. sieves are formed from the encapsulates B, the tubes and the sieves stack together alternately in the self-assembled entities.

IT 880076-32-4P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and crystal structure of a novel self-assembled 1,4-di-Me cucurbituril silver(I) complex)

RN 880076-32-4 CAPLUS

CN Silver(2+), diaqua(dodecahydro-2a,21b,21c,26b-tetramethyl-1H,4H,14H,17H-2,16:3,15-dimethano-5H,6H,7H,8H,9H,10H,11H,12H,13H,18H,19H,20H,21H,22H,23H,24H,25H,26H-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24a,25a,26a-tetracosazabispentaleno[1'',6'':5'',6'',7'']cycloocta[1'',2'',3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-1,4,6,8,10,12,14,17,19,21,23,25-dodecone)di-,

tetraaqua(dodecahydro-2a,21b,21c,26b-tetramethyl-1H,4H,14H,17H-2,16:3,15-dimethano-5H,6H,7H,8H,9H,10H,11H,12H,13H,18H,19H,20H,21H,22H,23H,24H,25H,26H-2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24a,25a,26a-tetracosazabispentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2'',3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-1,4,6,8,10,12,14,17,19,21,23,25-dodecone)disilver(2+) nitrate (1:1:4), octahydrate (9CI) (CA INDEX NAME)

CM 1

CRN 880076-31-3

CMF C40 H52 Ag2 N24 O16 . C40 H48 Ag2 N24 O14 . 4 N O3

CM 2

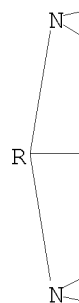
CRN 880076-30-2

CMF C40 H52 Ag2 N24 O16

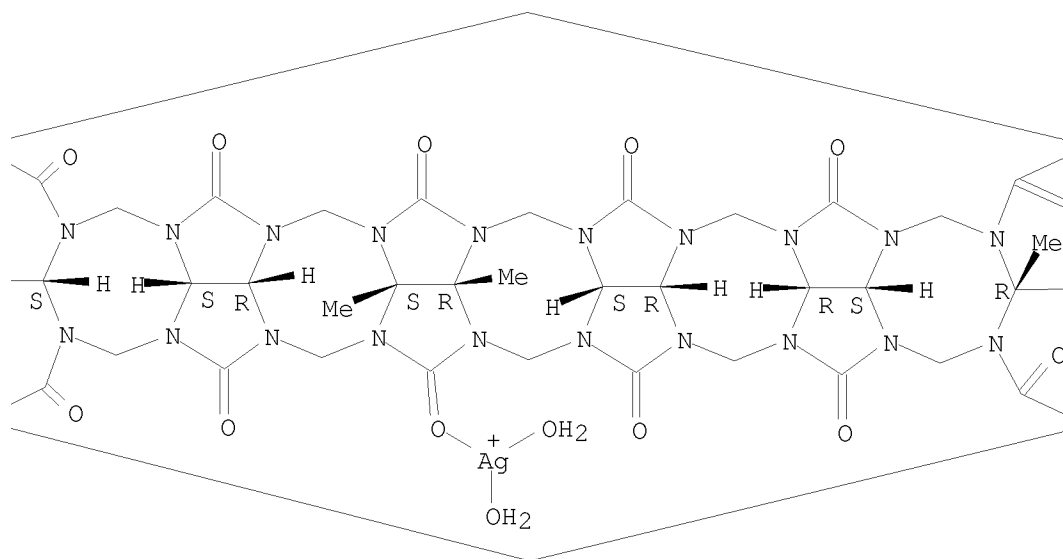
CCI CCS

Relative stereochemistry.

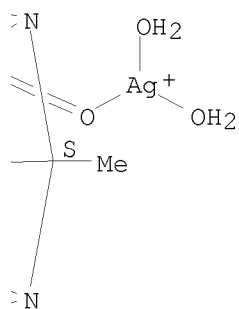
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PAGE 1-B



PAGE 1-C

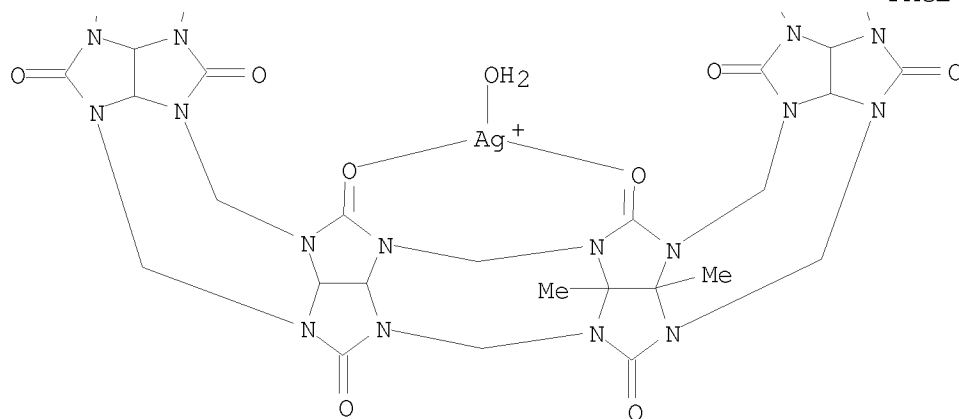
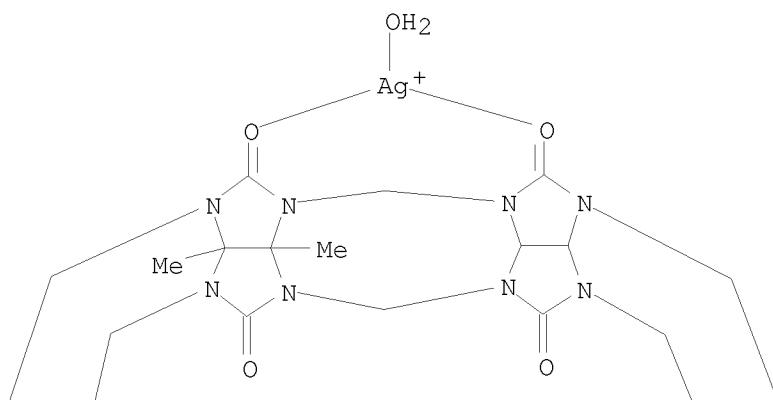


CM 3

CRN 880076-29-9

CMF C40 H48 Ag2 N24 O14

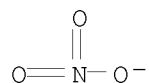
CCI CCS



CM 4

CRN 14797-55-8

CMF N 03



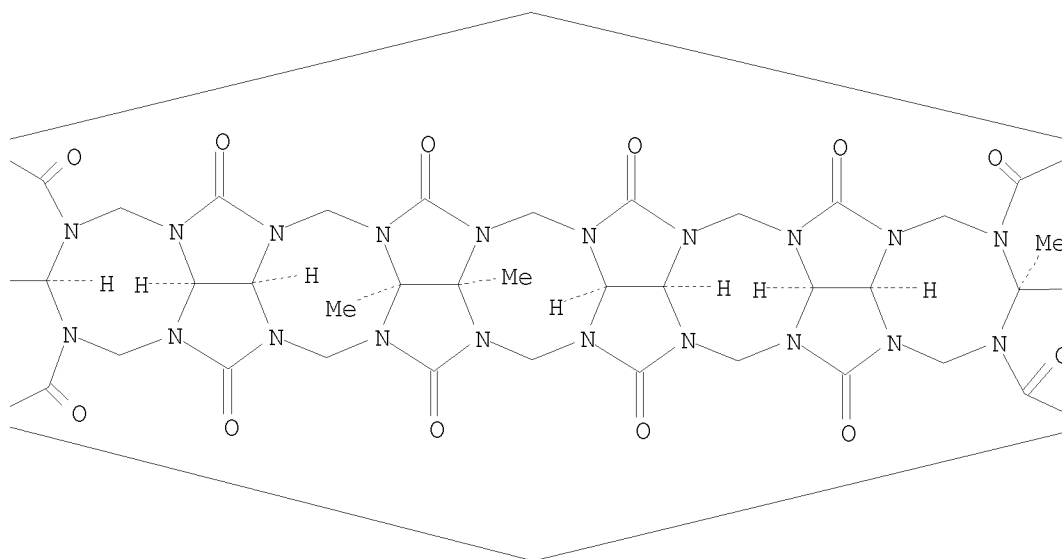
IT 848440-56-2
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of a novel self-assembled 1,4-di-Me cucurbituril silver(I)
 complex)
 RN 848440-56-2 CAPLUS
 CN 1H,4H,14H,17H-2,16:3,15-Dimethano-
 5H,6H,7H,8H,9H,10H,11H,12H,13H,18H,19H,20H,21H,22H,23H,24H,25H,26H-
 2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24
 a,25a,26a-tetracosazabispentaleno[1'',6'':5'',6'',7'']cycloocta[1'',2''
 ,3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-
 g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-
 1,4,6,8,10,12,14,17,19,21,23,25-dodecone,
 dodecahydro-2a,21b,21c,26b-tetramethyl-, stereoisomer (CA INDEX NAME)

Relative stereochemistry.

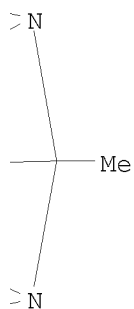
PAGE 1-A



PAGE 1-B



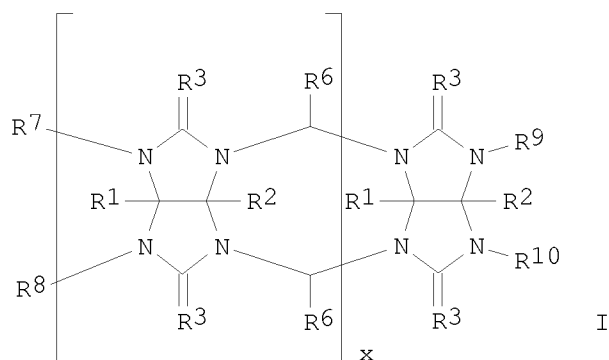
PAGE 1-C



L4 ANSWER 13 OF 18 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2005:1042246 CAPLUS
 DOCUMENT NUMBER: 143:347171
 TITLE: Method for preparing compounds comprising cucurbituril groups
 INVENTOR(S): Day, Anthony Ivan
 PATENT ASSIGNEE(S): Unisearch Limited, Australia
 SOURCE: PCT Int. Appl., 56 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent

LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005090351	A1	20050929	WO 2005-AU396	20050318
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2005222730	A1	20050929	AU 2005-222730	20050318
CA 2556857	A1	20050929	CA 2005-2556857	20050318
EP 1725558	A1	20061129	EP 2005-714268	20050318
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR				
CN 1930169	A	20070314	CN 2005-80007986	20050318
JP 2007529428	T	20071025	JP 2007-503155	20050318
IN 2006DN04501	A	20070824	IN 2006-DN4501	20060803
KR 2006135775	A	20061229	KR 2006-717057	20060824
US 20070287836	A1	20071213	US 2007-588846	20070430
PRIORITY APPLN. INFO.:			AU 2004-901473	A 20040319
			WO 2005-AU396	W 20050318
OTHER SOURCE(S):			CASREACT 143:347171; MARPAT 143:347171	
GI				



AB The present invention provides a method for preparing compds. comprising a plurality of cucurbituril groups. The method comprises forming a mixture comprising one or more compds. of the formula A-L-A wherein L is a linking group and A is group of the formula I [R1 and R2 independently = bond with L or univalent radical, or R1,R2 and the carbon atoms to which they are bound together from an (un)substituted cyclic group, or R1 of one unit and R2 of adjacent unit from a bond or divalent radical, etc.; R3 = O, S, NH,

etc.; R6 = bond with L, H, alkyl, and aryl; R7 and R8 or R9 and R10 independently = H and CHR6OR6, or R7 and R8 together form the group -CHR6OCHR6-, x = 0-10 with provisions], and an acid, and exposing the mixture to conditions effective for at least some of the groups A to form cucurbituril groups.

IT 865813-91-8P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of dimer, trimer and tetramers of glycolurils useful for preparing

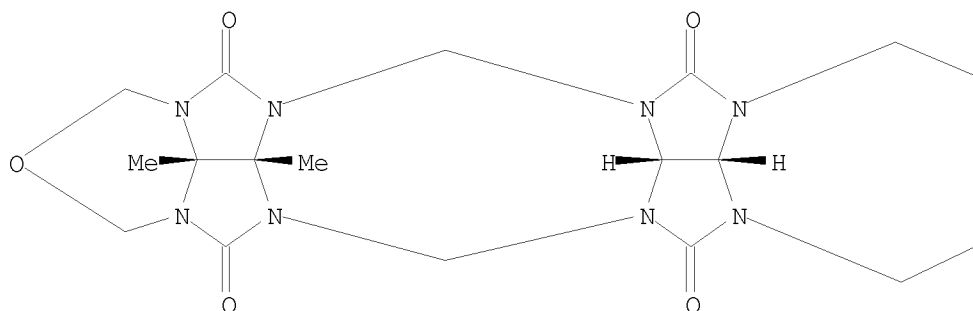
compound containing plurality of cucurbituril groups)

RN 865813-91-8 CAPLUS

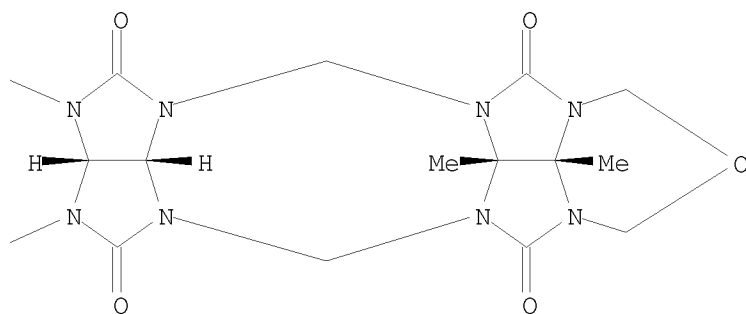
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Relative stereochemistry.

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 14 OF 18 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:260070 CAPLUS

DOCUMENT NUMBER: 142:336358

TITLE: Method for preparing cucurbiturils

INVENTOR(S): Day, Anthony Ivan; Arnold, Alan Peter; Blanch, Rodney

PATENT ASSIGNEE(S): John
 SOURCE: Unisearch Limited, Australia
 PCT Int. Appl., 58 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005026168	A1	20050324	WO 2004-AU1232	20040910
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2004272121	A1	20050324	AU 2004-272121	20040910
CA 2537843	A1	20050324	CA 2004-2537843	20040910
EP 1668012	A1	20060614	EP 2004-761268	20040910
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK			
CN 1878774	A	20061213	CN 2004-80033392	20040910
JP 2007505046	T	20070308	JP 2006-525577	20040910
KR 2006119979	A	20061124	KR 2006-705066	20060311
US 20070066818	A1	20070322	US 2006-571707	20060313
IN 2006DN01397	A	20070803	IN 2006-DN1397	20060314
PRIORITY APPLN. INFO.:			AU 2003-905037	A 20030912
			WO 2004-AU1232	W 20040910

OTHER SOURCE(S): CASREACT 142:336358; MARPAT 142:336358

AB The invention relates to a method for preparing cucurbiturils. The method comprises reacting an oligomer consisting of 2 to 11 linked glycolurils or glycoluril analogs with one or more compds. selected from glycoluril, glycoluril analogs and/or oligomers of glycoluril or glycoluril analogs, in the presence of an acid, to form a cucurbituril. The method can be used to prepare variably substituted cucurbiturils having specific substituted units at specific locations in the cucurbituril. Thus, dimethylcucurbit[1,4]uril was obtained by treating the formaldehyde diether of dimethylglycoluril with the diether of glycoluril and paraformaldehyde in concentrated HCl.

IT 569359-77-9P 848440-55-1P 848440-56-2P
 848440-58-4P 848440-61-9P 865813-91-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of cucurbiturils as complexing agents)

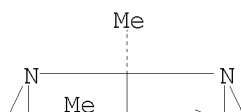
RN 569359-77-9 CAPLUS

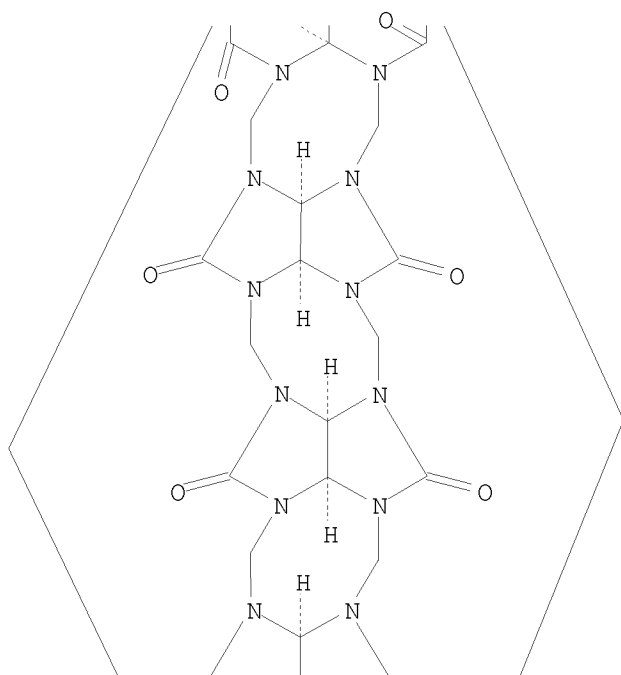
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 2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 13, 14, 15a, 16a, 17a, 18a, 19a, 20a, 21a, 22a-
 eicosaazabispentaleno[1'', 6''':5'', 6'', 7'']cycloocta[1'', 2'', 3'':3', 4']pe
 ntaleno[1', 6':5, 6, 7]cycloocta[1, 2, 3-cd:1', 2', 3'-gh]pentalene-
 1, 4, 6, 8, 10, 12, 15, 17, 19, 21-decone, decahydro-2a, 22b-dimethyl-, stereoisomer

(CA INDEX NAME)

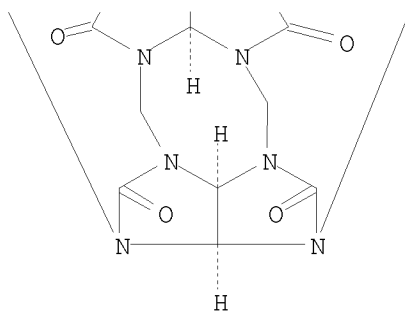
Relative stereochemistry.

PAGE 1-A





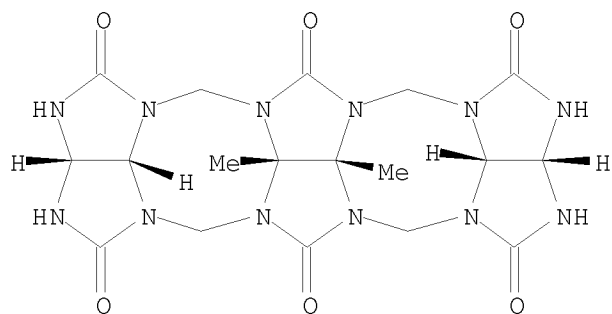
PAGE 2-A



PAGE 3-A

RN 848440-55-1 CAPLUS
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 Dodecaazabispentaleno[1',6':5,6,7]cycloocta[1,2,3-cd:1',2',3'-gh]pentalene-
 1,4,6,8,11,13(2H,3H,9H,10H)-hexone, hexahydro-13b,13c-dimethyl-,
 stereoisomer (9CI) (CA INDEX NAME)

Relative stereochemistry.



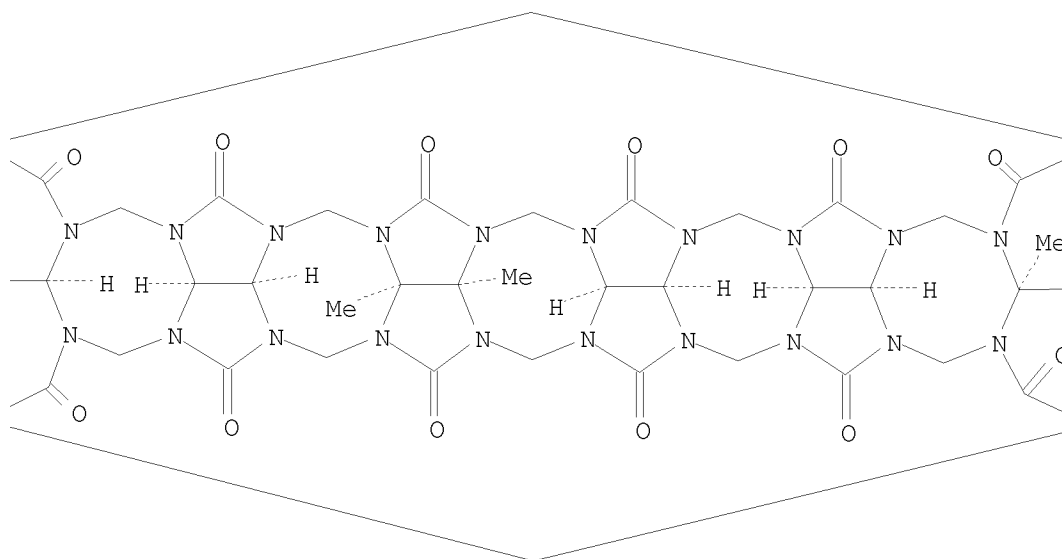
RN 848440-56-2 CAPLUS
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 a, 25a, 26a-tetracosazabispentaleno[1''', 6''':5'', 6'', 7'']cycloocta[1'', 2''
 , 3'':3', 4']pentaleno[1', 6':5, 6, 7]cycloocta[1, 2, 3-gh:1', 2', 3'-
 g'h']cycloocta[1, 2, 3-cd:5, 6, 7-c'd']dipentalene-
 1, 4, 6, 8, 10, 12, 14, 17, 19, 21, 23, 25-dodecone,
 dodecahydro-2a, 21b, 21c, 26b-tetramethyl-, stereoisomer (CA INDEX NAME)

Relative stereochemistry.

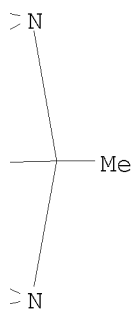
PAGE 1-A



PAGE 1-B



PAGE 1-C



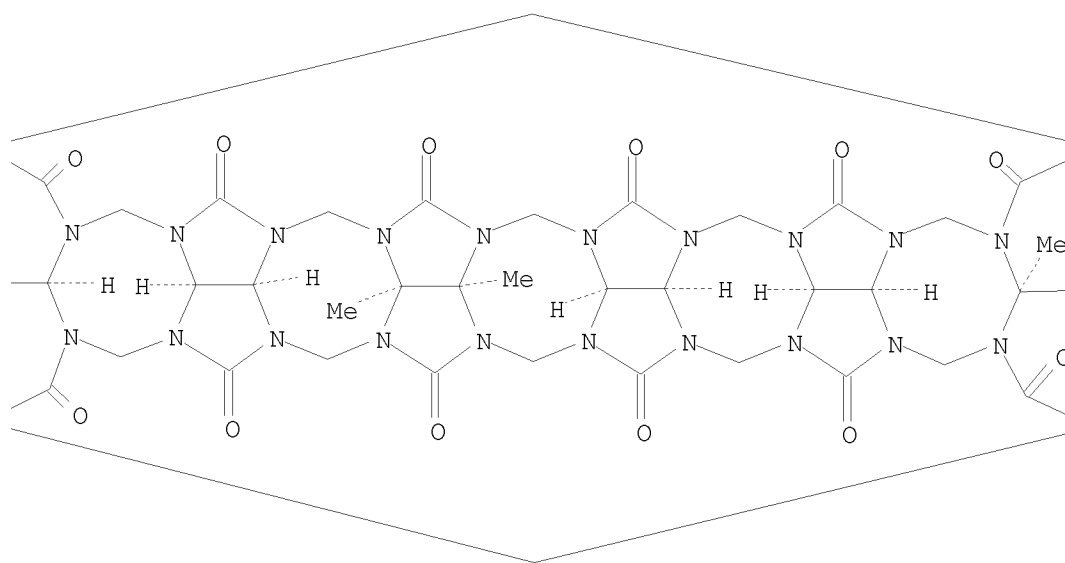
RN 848440-58-4 CAPLUS
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 2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24
 a,25a,26a-tetracosazabispentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2''
 ,3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-
 g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-
 1,4,6,8,10,12,14,17,19,21,23,25-dodecone,
 dodecahydro-2a,21b,21c-trimethyl-26b-phenyl-, stereoisomer (9CI) (CA
 INDEX NAME)

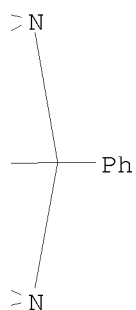
Relative stereochemistry.

PAGE 1-A



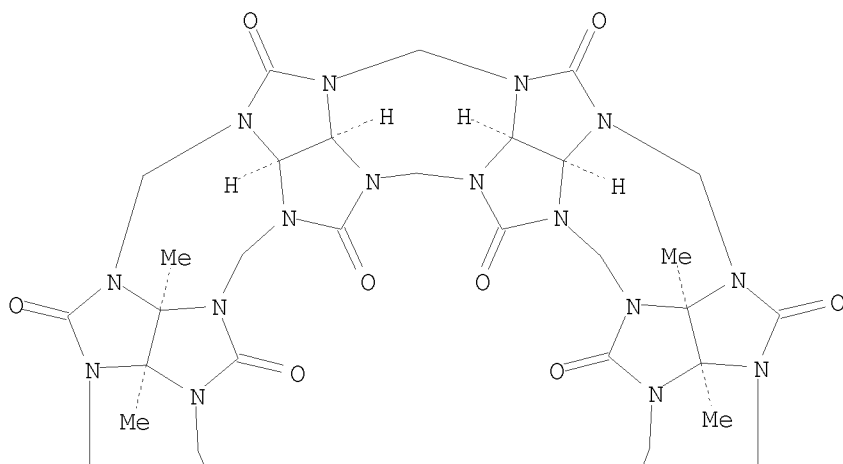
PAGE 1-B



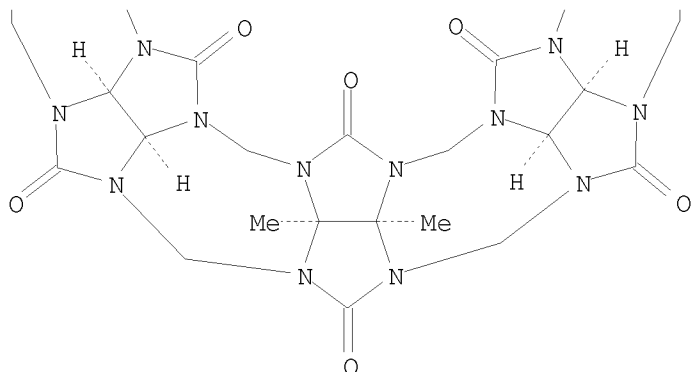


RN 848440-61-9 CAPLUS
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 a,20a,21a,22a,23a,24a,25a,26a,27a,28a,29a,30a-
 octacosazabispentaleno[1''',6''':5''',6''',7''']cycloocta[1''',2'
 ''',3''':3''',4''']pentaleno[1'',6'':5'',6'',7'']cycloocta[1'',2'',3'':
 3'',4'']pentaleno[1',6':5,6,7]cycloocta[1,2,3-cd:1',2',3'-gh]pentalene-
 1,4,6,8,10,12,14,16,19,21,23,25,27,29-tetradecone,
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 INDEX NAME)

Relative stereochemistry.



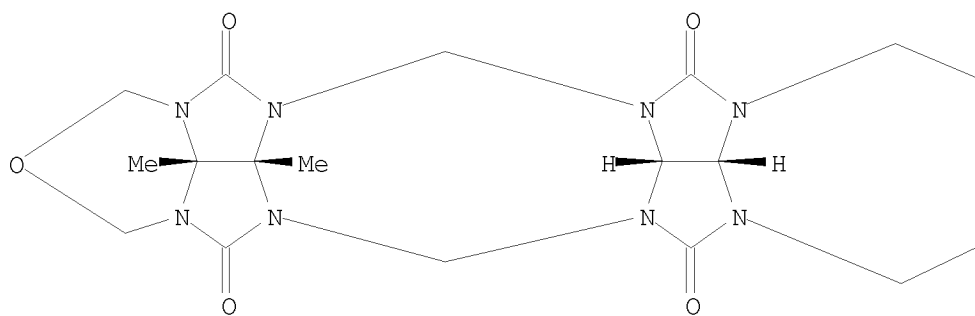
PAGE 2-A

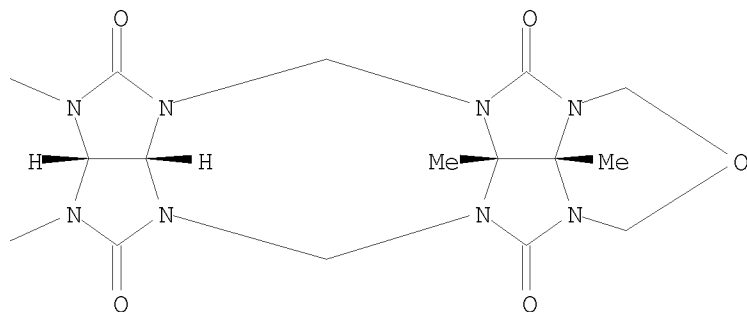


RN 865813-91-8 CAPLUS
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Relative stereochemistry.

PAGE 1-A





REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 15 OF 18 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:684964 CAPLUS

DOCUMENT NUMBER: 143:7687

TITLE: Synthesis of a symmetrical tetrasubstituted cucurbit[6]uril and its host-guest inclusion complex with 2,2'-bipyridine

AUTHOR(S): Zhao, Yunjie; Xue, Saifeng; Zhu, Qianjiang; Tao, Zhu; Zhang, Jianxin; Wei, Zhanbin; Long, Lasheng; Hu, Maolin; Xiao, Hongping; Day, Anthony I.

CORPORATE SOURCE: Institute of Applied Chemistry, Guizhou University, Guiyang, 550025, Peop. Rep. China

SOURCE: Chinese Science Bulletin (2004), 49(11), 1111-1116
CODEN: CSBUEF; ISSN: 1001-6538

PUBLISHER: Science in China Press

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 143:7687

AB Synthesis of a sym. tetramethylcucurbit[6]uril (TMeQ[6]) has been achieved by using the diether of dimethylglycoluril and the dimer of glycoluril. The structure of TMeQ[6] has been determined by single crystal X-ray diffraction, ¹H NMR spectroscopy and ESMS. The ¹H NMR spectra of 2,2'-bipyridine added to TMeQ[6] reveal that the host-guest inclusion complex was easily formed.

IT 848440-56-2P

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)

(preparation and crystal structure of sym. tetrasubstituted cucurbit[6]uril and its host-guest inclusion complex with bipyridine)

RN 848440-56-2 CAPLUS

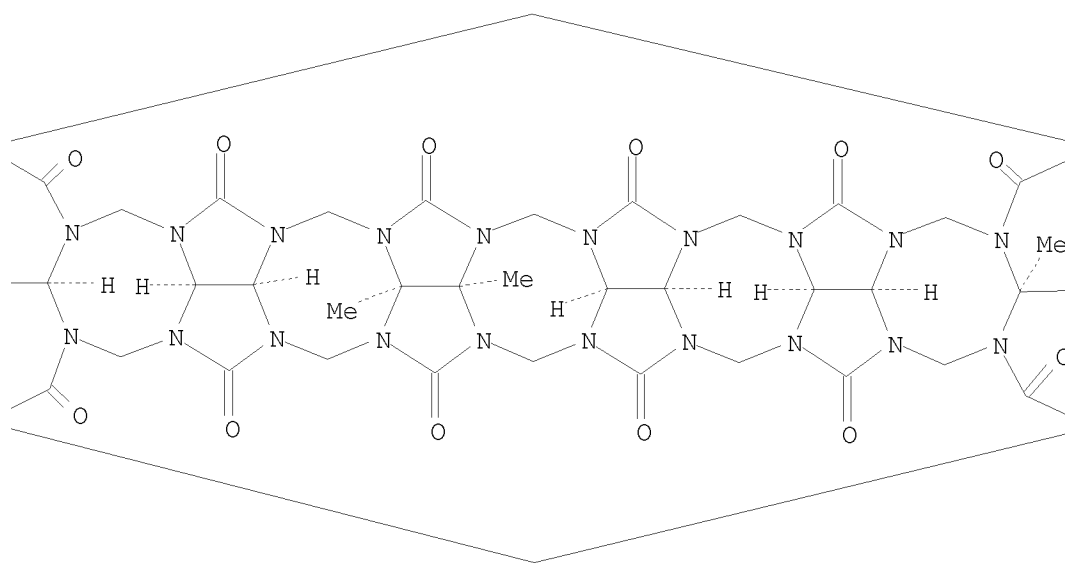
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5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-
2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24
a, 25a, 26a-tetracosazabispentaleno[1''', 6''':5'', 6'', 7'']cycloocta[1'', 2'',
3''':3', 4']pentaleno[1', 6':5, 6, 7]cycloocta[1, 2, 3-gh:1', 2', 3'-
g'h']cycloocta[1, 2, 3-cd:5, 6, 7-c'd']dipentalene-
1, 4, 6, 8, 10, 12, 14, 17, 19, 21, 23, 25-dodecone,
dodecahydro-2a, 21b, 21c, 26b-tetramethyl-, stereoisomer (CA INDEX NAME)

Relative stereochemistry.

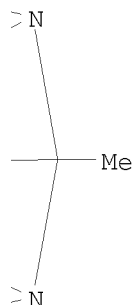
PAGE 1-A



PAGE 1-B



PAGE 1-C



REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 16 OF 18 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:590408 CAPLUS

DOCUMENT NUMBER: 139:135453

TITLE: Cucurbiturils and method for binding gases and volatiles using cucurbiturils

INVENTOR(S): Day, Anthony Ivan; Arnold, Alan Peter; Blanch, Rodney John

PATENT ASSIGNEE(S): Unisearch Limited, Australia

SOURCE: U.S. Pat. Appl. Publ., 12 pp., Cont.-in-part of U. S. Ser. No. 999,770.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20030140787	A1	20030731	US 2002-301874	20021122
US 6869466	B2	20050322		
WO 2000068232	A1	20001116	WO 2000-AU412	20000505
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 6793839	B1	20040921	US 2002-959770	20020107
AU 2002302117	A1	20030320	AU 2002-302117	20021122
AU 2002302117	B2	20060810		
IN 2006DE02152	A	20070907	IN 2006-DE2152	20060928
PRIORITY APPLN. INFO.:			AU 1999-232	A 19990507

WO 2000-AU412	W 20000505
AU 2001-9031	A 20011122
US 2002-959770	A2 20020107
AU 2000-43851	A 20000505
IN 2000-DE485	A3 20000508

AB Gases or volatile compds. are bound by cucurbiturils as a cucurbituril-gas/volatile complex. The gases or volatile compds. can be separated from a mixture of compds. by contacting the mix with a cucurbituril whereby at least some of the gas or volatile compound is bound to the cucurbituril to form a cucurbituril complex, followed by the release of at least some of the bound gas or volatile compound from that complex. The use of cucurbiturils in binding gases and volatile compds. is suitable for storage, safety, delivery or other uses, such as the trapping of an unpleasant or toxic gas or volatile compound

IT 569359-77-9 569363-90-2 569363-91-3

RL: TEM (Technical or engineered material use); USES (Uses)

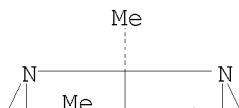
(cucurbiturils and method for binding gases and volatiles using cucurbiturils)

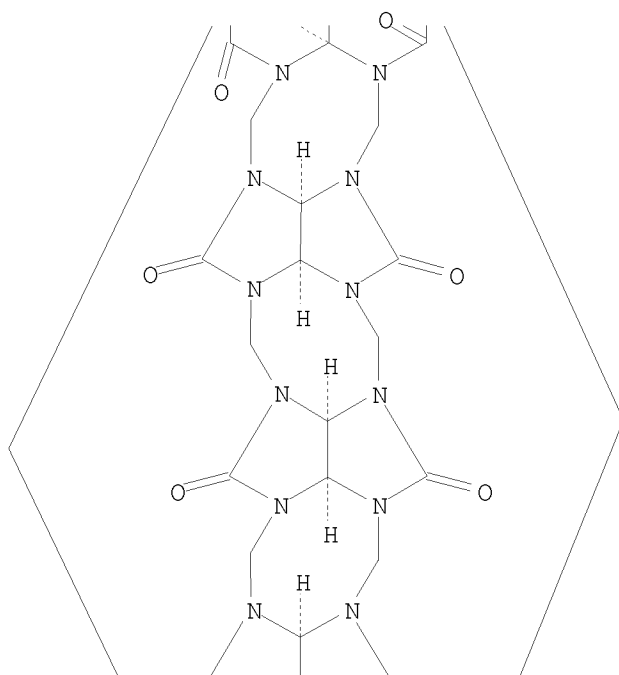
RN 569359-77-9 CAPLUS

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2,3,4a,5a,6a,7a,8a,9a,10a,11a,13,14,15a,16a,17a,18a,19a,20a,21a,22a-
eicosaazabispentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2'',3'':3',4']pe
ntaleno[1',6':5,6,7]cycloocta[1,2,3-cd:1',2',3'-gh]pentalene-
1,4,6,8,10,12,15,17,19,21-decone, decahydro-2a,22b-dimethyl-, stereoisomer
(CA INDEX NAME)

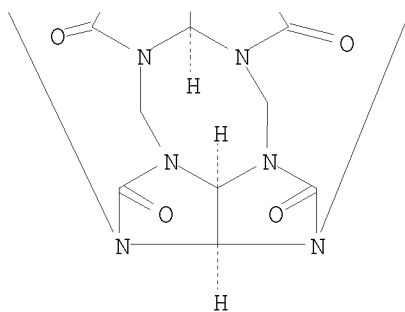
Relative stereochemistry.

PAGE 1-A





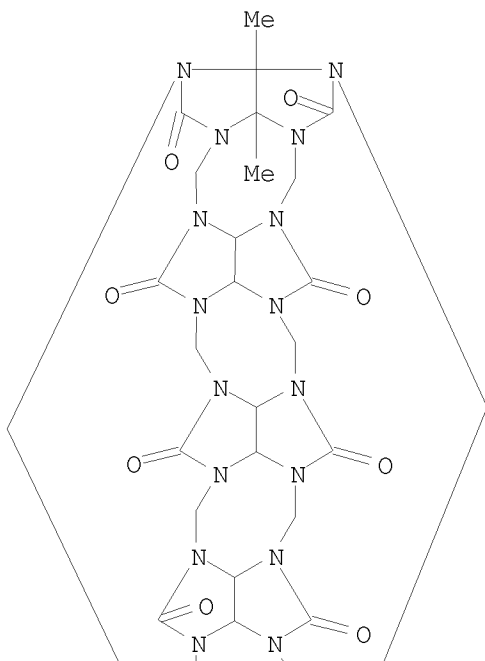
PAGE 2-A



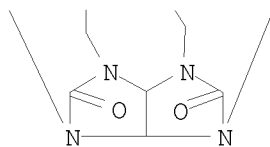
PAGE 3-A

RN 569363-90-2 CAPLUS
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 2,3,4a,5a,6a,7a,8a,9a,10a,11a,13,14,15a,16a,17a,18a,19a,20a,21a,22a-
 eicosaazabispentaleno[1'',6'':5'',6'',7'']cycloocta[1'',2'',3'':3',4']pe
 ntaleno[1',6':5,6,7]cycloocta[1,2,3-cd:1',2',3'-gh]pentalene-
 1,4,6,8,10,12,15,17,19,21-decone, decahydro-2a,13a,15b,22b(or
 2a,17b,17c,22b)-tetramethyl-, stereoisomer (9CI) (CA INDEX NAME)

PAGE 1-A

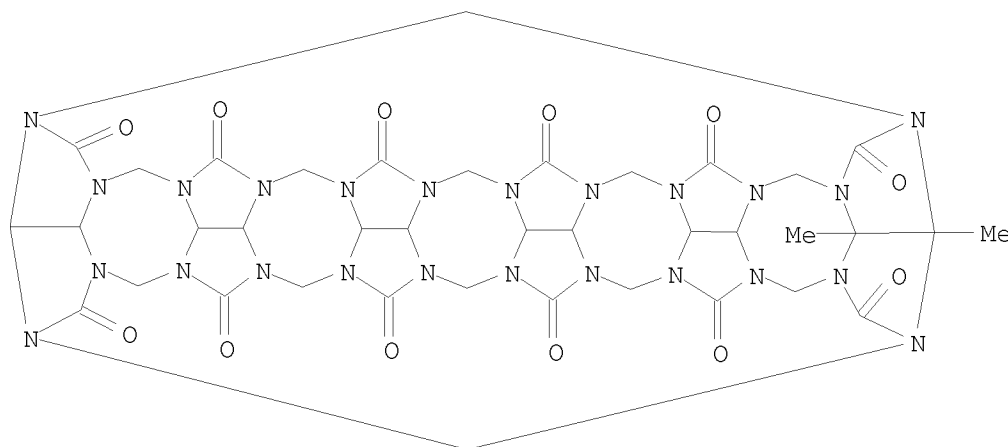


PAGE 2-A



2 (D1-Me)

RN 569363-91-3 CAPLUS
 CN 1H, 4H, 14H, 17H-2, 16:3, 15-Dimethano-
 5H, 6H, 7H, 8H, 9H, 10H, 11H, 12H, 13H, 18H, 19H, 20H, 21H, 22H, 23H, 24H, 25H, 26H-
 2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24
 a, 25a, 26a-tetracosazabispentaleno[1''', 6''':5'', 6'', 7'']cycloocta[1'', 2'',
 3'':3', 4']pentaleno[1', 6':5, 6, 7]cycloocta[1, 2, 3-gh:1', 2', 3'-
 g'h']cycloocta[1, 2, 3-cd:5, 6, 7-c'd']dipentalene-
 1, 4, 6, 8, 10, 12, 14, 17, 19, 21, 23, 25-dodecone,
 dodecahydro-2a, 26b, ?, ?, ?, ?-hexamethyl-, stereoisomer (9CI) (CA INDEX
 NAME)



4 (D1-Me)

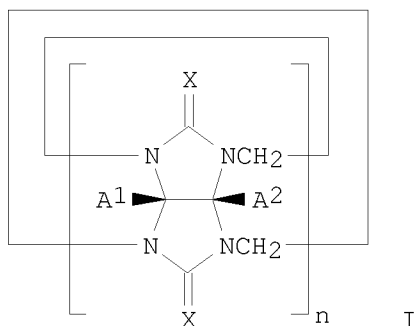
L4 ANSWER 17 OF 18 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2003:532669 CAPLUS
 DOCUMENT NUMBER: 139:101129
 TITLE: Methods for preparation of hydroxycucurbituril derivatives and their uses
 INVENTOR(S): Kim, Ki-Moon; Jon, Sang-Yong; Selvapalam, Narayanan; Oh, Dong-Hyun
 PATENT ASSIGNEE(S): Postech Foundation, S. Korea
 SOURCE: PCT Int. Appl., 45 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003055888	A1	20030710	WO 2002-KR2213	20021126
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
KR 2003060053	A	20030712	KR 2002-68362	20021106
CA 2468801	A1	20030710	CA 2002-2468801	20021126
AU 2002361511	A1	20030715	AU 2002-361511	20021126
AU 2002361511	B2	20061005		
EP 1463732	A1	20041006	EP 2002-796981	20021126

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

CN 1604899	A	20050406	CN 2002-825227	20021126
JP 2005526708	T	20050908	JP 2003-556418	20021126
NZ 533179	A	20060331	NZ 2002-533179	20021126
IN 2004DN01493	A	20070316	IN 2004-DN1493	20040601
US 20050075498	A1	20050407	US 2004-497464	20040602
US 7388099	B2	20080617		
US 20080260676	A1	20081023	US 2008-138883	20080613
PRIORITY APPLN. INFO.:			KR 2002-318	A 20020103
			KR 2002-68362	A 20021106
			KR 2002-2002	A 20020103
			WO 2002-KR2213	W 20021126
			US 2004-497464	A3 20040602

OTHER SOURCE(S): CASREACT 139:101129; MARPAT 139:101129
 GI



AB Provided are hydroxycucurbituril derivs., e.g., I [A1, A2 = OH, (un)substituted C1-30-alkoxy, C1-30-alkenyloxy (sic), C1-30-alkynyloxy (sic), C2-30-carbonylalkoxy, C1-30-thioalkoxy, C1-30-alkylthiooxy, C1-30-hydroxyalkoxy, C1-30-alkylsilyloxy, C1-30-aminoalkoxy, C1-30-aminoalkylthioalkoxy, C5-30-cycloalkoxy, C2-30-heterocycloalkoxy, C6-30-aryloxy, C6-20-arylalkoxy, C4-30-heteroaryloxy, C1-30-alkylthio, C1-30-alkenylthio (sic), C1-30-alkynylthio (sic), C2-30-carbonylalkylthio, C1-30-alkylsilylthio, C1-30-aminoalkylthio, C1-30-aminoalkylthioalkylthio, C5-30-cycloalkylthio, C2-30-heterocycloalkylthio, C6-30-arylthio, C6-20-arylalkylthio (sic), C4-30-heteroarylthio, C4-30-heteroarylalkylthio, C1-30-alkylamino, C1-30-alkenylamino (sic), C1-30-alkynylamino (sic), C2-30-carbonylalkylamino, C1-30-thioalkylamino, C1-30-hydroxyalkylamino, C1-30-alkylsilylamino, C1-30-aminoalkylamino, C5-30-cycloalkylamino, C2-30-heterocycloalkylamino, C6-30-arylamine, C4-30-heteroarylamine; A1 = A2 = H; X = O, S, NH; n = 4 - 20], their preparation methods and uses. Thus, hydroxycucurbit[6]uril (I; A1 = A2 = OH, X = O, n = 6) was prepared in 55% yield from cucurbit[6]uril (I; A1 = A2 = H, X = O, n = 6) via oxidation with aqueous K2S2O8. The hydroxycucurbituril derivative is easy to further functionalize with enhanced solubility in common solvents, thereby providing wider applications, e.g., in agrochems., cosmetics, medicinals and wastewater treatment. Hydroxycucurbit[6]uril formed: a 1:1 host-guest complex with THF; a 1:1 host-guest complex with isobutene; and formed an ion selective membrane with polyvinyl chloride.

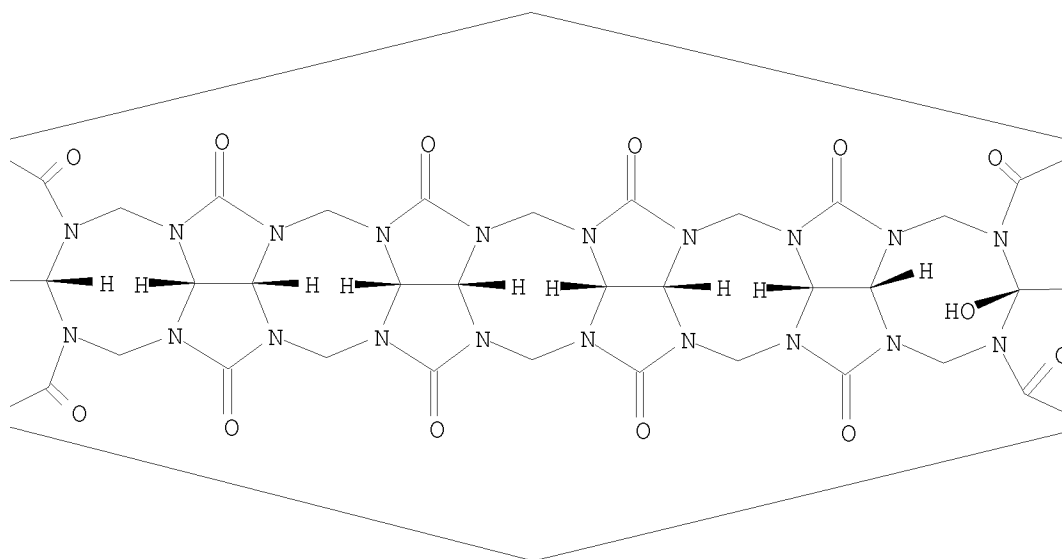
IT 558445-98-0P
 RL: AMX (Analytical matrix); BSU (Biological study, unclassified); MOA (Modifier or additive use); REM (Removal or disposal); SPN (Synthetic preparation); TEM (Technical or engineered material use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
 (preparation of hydroxycucurbituril derivs. and their uses)
 RN 558445-98-0 CAPLUS
 CN 1H,4H,14H,17H-2,16:3,15-Dimethano-
 5H,6H,7H,8H,9H,10H,11H,12H,13H,18H,19H,20H,21H,22H,23H,24H,25H,26H-
 2,3,4a,5a,6a,7a,8a,9a,10a,11a,12a,13a,15,16,17a,18a,19a,20a,21a,22a,23a,24
 a,25a,26a-tetracosazabispentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2''
 ,3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-
 g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-
 1,4,6,8,10,12,14,17,19,21,23,25-dodecone, dodecahydro-2a,26b-dihydroxy-,
 stereoisomer (9CI) (CA INDEX NAME)

Relative stereochemistry.

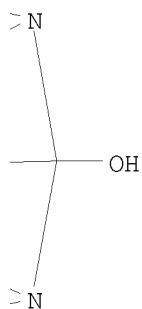
PAGE 1-A



PAGE 1-B



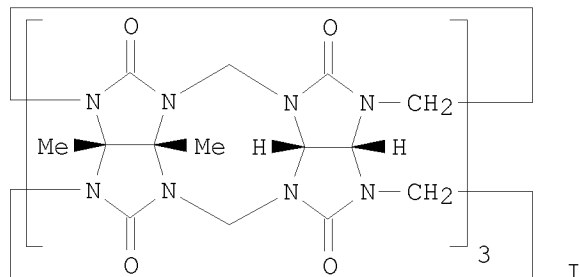
PAGE 1-C



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

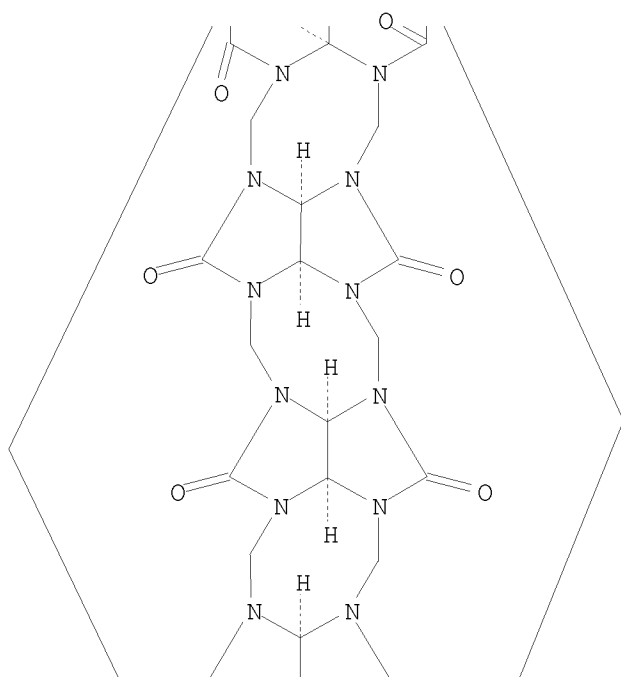
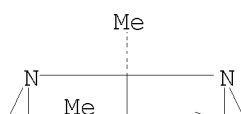
L4 ANSWER 18 OF 18 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2003:316145 CAPLUS
 DOCUMENT NUMBER: 140:77122
 TITLE: A method for synthesizing partially substituted cucurbit[n]uril
 AUTHOR(S): Day, Anthony I.; Arnold, Alan P.; Blanch, Rodney J.
 CORPORATE SOURCE: School of Chemistry, University College (UNSW), Australian Defence Force Academy, Canberra, ACT 2600,

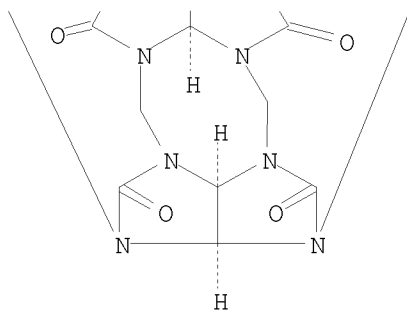
SOURCE: Australia
 Molecules (2003), 8(1), 74-84
 CODEN: MOLEFW; ISSN: 1420-3049
 URL: <http://www.mdpi.org/molecules/papers/80100074.pdf>
 PUBLISHER: Molecular Diversity Preservation International
 DOCUMENT TYPE: Journal; (online computer file)
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 140:77122
 GI



AB A novel approach to cucurbituril synthesis is described where partial substitution is introduced into cucurbit[n]uril. The identification of homologs (and their substitution) in reaction mixts. is achieved by a combination of ESMS and the use of the mol. probes (guests) 1,4-dioxane and 1,9-octanediamine. A unique sym. hexamethylcucurbit[3,3]uril (I), the major product, was isolated and characterized.
 IT 569359-77-9P 640732-36-1P 640732-37-2P
 640732-38-3P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (cyclocondensation of glycouril and its dimethyltetra-cyclic ether in preparation of partially substituted cucurbituril cyclic oligomers)
 RN 569359-77-9 CAPLUS
 CN 1H, 4H, 12H, 15H-2, 14:3, 13-Dimethano-
 5H, 6H, 7H, 8H, 9H, 10H, 11H, 16H, 17H, 18H, 19H, 20H, 21H, 22H-
 2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 13, 14, 15a, 16a, 17a, 18a, 19a, 20a, 21a, 22a-
 eicosazabispentaleno[1'', 6'':5'', 6'', 7'']cycloocta[1'', 2'', 3'':3', 4']pe-
 ntaleno[1', 6':5, 6, 7]cycloocta[1, 2, 3-cd:1', 2', 3'-gh]pentalene-
 1, 4, 6, 8, 10, 12, 15, 17, 19, 21-decone, decahydro-2a, 22b-dimethyl-, stereoisomer
 (CA INDEX NAME)

Relative stereochemistry.



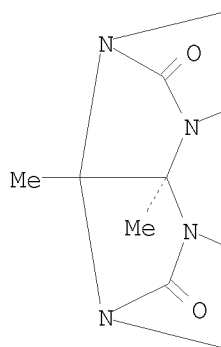


PAGE 3-A

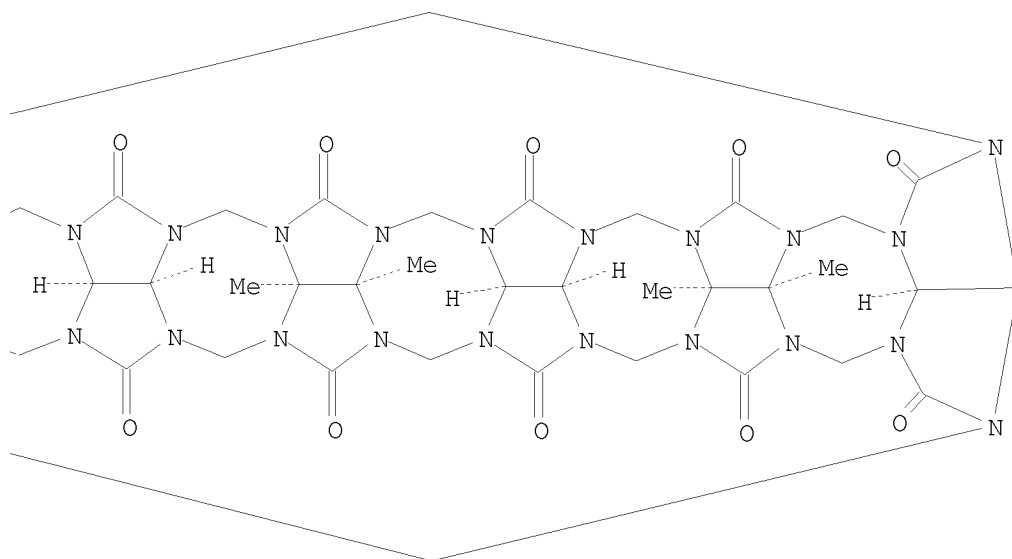
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 a,25a,26a-tetracosazabispentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2'',
 3'':3',4']pentaleno[1',6':5,6,7]cycloocta[1,2,3-gh:1',2',3'-
 g'h']cycloocta[1,2,3-cd:5,6,7-c'd']dipentalene-
 1,4,6,8,10,12,14,17,19,21,23,25-dodecone,
 dodecahydro-2a,19b,19c,23b,23c,26b-hexamethyl-, stereoisomer (9CI) (CA
 INDEX NAME)

Relative stereochemistry.

PAGE 1-A



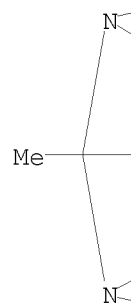
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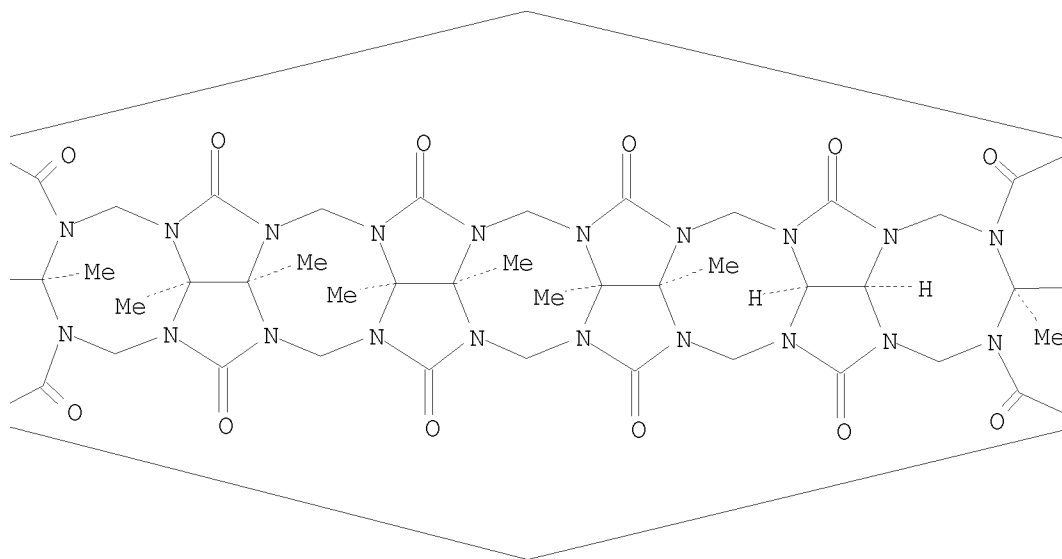
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 2, 3, 4a, 5a, 6a, 7a, 8a, 9a, 10a, 11a, 12a, 13a, 15, 16, 17a, 18a, 19a, 20a, 21a, 22a, 23a, 24
 a, 25a, 26a-tetracosazabispentaleno[1''', 6''':5'', 6'', 7'']cycloocta[1'', 2''
 , 3'':3', 4']pentaleno[1', 6':5, 6, 7]cycloocta[1, 2, 3-gh:1', 2', 3'-
 g'h']cycloocta[1, 2, 3-cd:5, 6, 7-c'd']dipentalene-
 1, 4, 6, 8, 10, 12, 14, 17, 19, 21, 23, 25-dodecone,
 dodecahydro-2a, 15a, 17b, 19b, 19c, 21b, 21c, 23b, 23c, 26b-decamethyl-,
 stereoisomer (9CI) (CA INDEX NAME)

Relative stereochemistry.

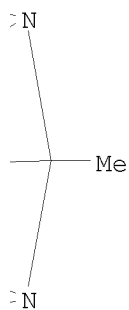
PAGE 1-A



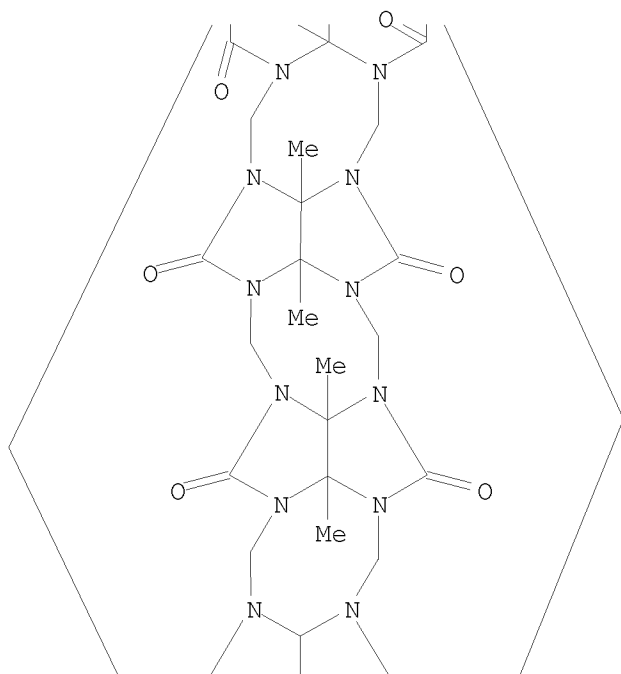
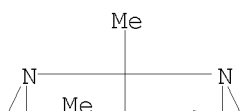
PAGE 1-B



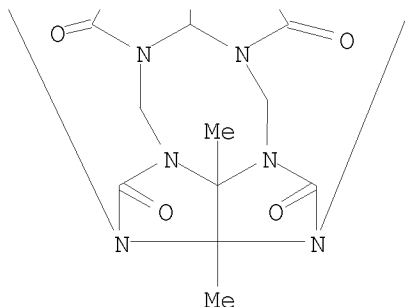
PAGE 1-C



RN 640732-38-3 CAPLUS
 CN 1H,4H,12H,15H-2,14:3,13-Dimethano-
 5H,6H,7H,8H,9H,10H,11H,16H,17H,18H,19H,20H,21H,22H-
 2,3,4a,5a,6a,7a,8a,9a,10a,11a,13,14,15a,16a,17a,18a,19a,20a,21a,22a-
 eicosaazabispentaleno[1''',6''':5'',6'',7'']cycloocta[1'',2'',3'':3',4']pe
 ntaleno[1',6':5,6,7]cycloocta[1,2,3-cd:1',2',3'-gh]pentalene-
 1,4,6,8,10,12,15,17,19,21-decone, decahydro-2a,13a,15b,17b,17c,19b,19c,22b-
 octamethyl-, stereoisomer (9CI) (CA INDEX NAME)



PAGE 3-A



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
102.02	288.12

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-14.76	-14.76

CA SUBSCRIBER PRICE

SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 07:50:36 ON 20 JAN 2009